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ABSTRACT

Eight units of study, each divided into three or four episodes, make up this Illinois driver's education curriculum for commercial schools. Each unit contains behavioral objectives for the unit and for the individual episodes, each of which is broken down into sub-objectives with corresponding content information or tasks to be performed. The eight units make up a four-part curriculum: (1) The Nature of the Driving Task, (2) Basic Knowledge and Skills for Vehicle Operation, (3) Driving Strategies and Tactics, and (4) Highway User Responsibilities. Part I (four pages), an introduction and orientation to the driving task, focuses on understanding the complex highway transportation system (HTS) and the driver's role in it. Part II (28 pages) deals with understanding laws and regulations and developing habits and skills for safe vehicle operation. Part III (22 pages) is concerned with principles for efficient observation, perception, and identification of significant HTS events and potential hazards; concepts and principles for improvement of judgmental abilities; evaluation of highway characteristics, traffic controls, weather conditions; prediction of actions of other drivers; estimation of spatial relationships; and decisionmaking for safe driving. Part Four (50 pages) covers driver condition and behavior, alcohol and other drugs, obedience to and enforcement of traffic laws; post crash procedures and responsibilities; selection, inspection, and maintenance of safe vehicles; and basic vehicle dynamics and advanced driving techniques. Four pages of bibliographic references are included. (LAS)

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MODEL CURRICULUM FOR COMMERCIAL DRIVING SCHOOLS

Prepared Under Contract Number B-76
For
Illinois Office of Education
Safety Education Section, Springfield, Illinois

Project Director

Dr. James E. Aaron

Project Assistant

Dan V. Shannon

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Safety Center
Southern Illinois University
Carbondale, Illinois

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PART I

Nature of the Driving Task

Unit 1 serves as an introduction and orientation to the driving task. In order to learn the nature of the driving task, it is important that the student recognize that automobile driving takes place in a system, a highway transportation system, and that this system is complex and important in our way of life. The student should also understand that he, as a vehicle operator, is a vital part of this system and is responsible for its safe operation. The safe operation of the highway transportation system; i.e. avoidance of accidents, has become one of the nation's leading social and economic problems.

UNIT OBJECTIVE - The student can describe and define the general nature of the driving task in our complex Highway Transportation System (HTS) and the consequences of system failures.

EPISODE 1.1 Understanding the Complex Highway Transportation System (HTS)

EPISODE OBJECTIVE - The student can define the HTS as a rather complex man-machine system whose purpose is the safe, efficient, and convenient movement of people or goods from place to place.

1.11 The student can state the definition of the HTS as a rather complex man-machine system using a highway environment.

1.12 The student can state the purpose of the HTS as the safe, efficient, and convenient movement of people and goods from one place to another.

1.13 The student can list the three basic components of the HTS.

1.131 People who used the system
1.132 Vehicles that carry the goods and people
1.133 Highways that are used by the vehicles to move on

1.14 The student can list the various types of users of the HTS.

1.141 Drivers
1.142 Passengers
1.143 Pedestrians

1.15 The student can list various types of vehicles that use the HTS.

1.151 Passenger cars
1.152 Trucks
1.153 Buses
1.154 Motorcycles
1.155 Bicycles

1.16 The student can list various types of highways in the HTS.

1.161 Expressways
1.162 Rural highways
1.163 City streets
1.164 Alleys

EPISODE 1.2 Driver Role in the HTS

EPISODE OBJECTIVE - The student can define driving as consisting of the taking of skilled and properly timed actions under varying road and traffic conditions, based on decisions which are dependent upon sound judgments, realistic perceptions, and learned information.

1.21 The student can describe various motor skills required for the safe operation of a vehicle in the HTS.

1.121 Steering
1.122 Braking
1.123 Acceleration

1.22 The student can list various road and traffic conditions which influence the driving task.

1.221 Roadway design
1.222 Roadway surface

1. Asphalt
2. Concrete
3. Gravel
4. Dirt
5. Brick

1.223 Traffic volume
1.224 Weather conditions

1.23 The student can list factors which influence driver judgment and perception.

1.231 Visual acuity
1.232 Age
1.233 Experience
1.234 Fatigue
1.235 Ingestion of alcohol or other drugs
1.236 Emotional stress

EPISODE 1.3 HTS Failures and Their Consequences

EPISODE OBJECTIVE - The student recognizes that traffic accidents and congestion have created some of our most serious economic and social problems.

1.31 The student can list various factors which complicate traffic problems and lead to traffic accidents.

1.131 Driver and/or pedestrian error
1.132 Poor vehicle maintenance
1.133 Roadway shortcomings

1. Roadway disrepair
2. Inadequate signs
3. Crowded Highways
4. Low illumination

1.32 The student can list and discuss social and economic problems which result from traffic accidents.

1.321 Injuries to drivers, passengers, and pedestrians
1.322 Death to drivers, passengers, and pedestrians
1.323 Monetary expense of injuries and death
1.324 Monetary expense of property damage

1. Vehicle
2. Highway environment

1.325 Loss of efficiency and convenience of the system

Suggested Learning Activities

1. Read Chapter 1, pages 1 through 14, of Sportsmanlike Driving, 7th edition.
2. Choose the best definition of "system" (check several sources) which fits the HTS. Describe and explain, using your own words, the purpose of the HTS.
3. List the main parts of each of the three major components of the HTS. Collect and construct examples of each. You may use photographs and illustrations.
4. Explain in your own words what you think is involved in the driving task.
5. Observe traffic at a given intersection. Keep a record of how drivers do and do not cooperate with each other and with other highway users.
6. Chart the classic automobile accident statistics. Include the number of fatalities, injuries, accidents, and the cost of motor vehicle accidents.
7. Write a short paper explaining why driving is primarily a mental and social task.
8. Observe an experienced driver and analyze the driver action. Classify into meaningful groups what the driver did. List the kinds of knowledge or stored information the driver probably used for each group of actions.

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PART II

Basic Knowledge and Skills for Vehicle Operation

UNIT 2.0 Understanding Laws and Regulations

UNIT OBJECTIVE - The student can define traffic regulations and their requirements and recognize the various situations or conditions under which they apply.

EPISODE 2.1 Signs, Signals, and Roadway Markings

EPISODE OBJECTIVE - The student can identify, classify, and state the meaning of the various signs, signals, and roadway markings.

2.11 The student can identify and state the meaning of the various highway signs by their shapes.

- 2.111 Octagon; always means stop
- 2.112 Triangle; means yield
- 2.113 Round; means railroad crossing
- 2.114 Diamond; means warning of possible hazard
- 2.115 Pentagon; means school zone or school crossing
- 2.116 Horizontal Rectangle; usually means a guide sign
- 2.117 Vertical Rectangle; usually means regulatory sign

2.12 The student can identify and state the meaning of various highway signs by their colors.

- 2.121 Red; prohibits or restricts traffic movement
- 2.122 Black and white; primarily regulate speed and direction of traffic
- 2.123 Yellow; warning of possible hazards
- 2.124 Orange; warning of construction or maintenance
- 2.125 Green; general information, direction, and guidance
- 2.126 Blue; rest areas and general services
- 2.127 Brown; national parks and recreation

2.13 The student can identify and state the meaning of the various traffic signals.

2.131 A red light requires a stop at the marked stop line. If there is no marked stop line, stop before entering the crosswalk on the near side of the intersection. If there is no crosswalk, stop before entering the intersection. Wait until the signal changes to green before you proceed. A right turn is permitted at a red light under certain conditions. You must come to a full stop, look for traffic on the roadway you are entering, and yield the right-of-way to any traffic on that roadway. You may then proceed cautiously to make your right turn.

2.132 The yellow light warns that the signal is changing from green to red. When the red light appears, you are prohibited from entering the intersection.

2.133 The green light means you may proceed if it is safe to do so. You may go straight ahead or you may turn right or left unless a sign or a traffic policeman prohibits such a turn. You must first, however, yield the right-of-way to pedestrians and vehicles that are still within the intersection.

2.134 A green arrow, pointing upward means you may go straight ahead only, but you must first yield the right-of-way to vehicles and pedestrians within the intersection.

2.135 A green arrow, pointing right **or left** means you may make a turn in the direction of the arrow, if you are in the proper lane for such a turn, after yielding the right-of-way to vehicles and pedestrians within the intersection.

2.136 A yellow arrow may appear after a green arrow. It means the same thing as the yellow light but applies only to the lane indicated by the green arrow.

2.137 A flashing red light means the same thing as a stop sign. It is used at dangerous intersections or at places where a **stop** sign alone might be difficult to see.

2.138 A flashing yellow light means you may proceed only with caution. It is used at or in advance of intersections or locations where caution is required.

2.139 Lane signals are sometimes used on freeways and expressways. They appear as single units over each lane of the roadway, and are most often used when the direction of the flow of traffic changes during different hours of the day. You must never drive in a lane with a red X, regardless of any other signs or signals. A yellow X means that your lane signal is going to change to red. Prepare to leave the lane safely before the red X appears. You may drive in lanes underneath the green arrow, but you must also obey all other signs and signals.

2.1310 Flashing red lights are used at railroad crossings to warn of the approach of a train. When the lights begin to flash, STOP. Never try to beat a train.

2.14 The student can identify and state the meaning of various roadway markings.

2.141 Edgelines are the solid lines along the side of the pavement. They serve as a safety guide, especially at night when it is difficult to see the edge of the road. Yellow edge lines are used on the left side and white edge lines are used on the right side where separate roadways are provided for traffic in each direction.

2.142 Lane lines are placed between traffic lanes moving in the same direction. You are required to drive between these lines except when changing lanes or turning.

2.143 Stop lines are white lines painted across the pavement at intersections indicating the exact place at which to stop. In urban areas the line is usually located about four feet before the crosswalk. Drivers must stop at the stop line, when present, not at the stop sign or traffic control signal.

2.144 Crosswalk lines are painted across or partially across the pavement. When pedestrians are in those crosswalks, they have the right-of-way over motor vehicles. Crosswalks are sometimes in the middle of the block in residential areas, and in this case, a pedestrian crossing sign is located at the white lines.

2.145 Railroad crossing markings. In front of railroad crossings, the pavement is marked with a large white X and two R's. A yellow line is used to prevent passing in advance of the crossing, and a white stop line is painted on each side of the track.

2.146 Yellow center lines are used to separate traffic moving in opposite directions on paved roadways. A broken yellow line is used when there are only two lanes. When there are four or more lanes with traffic moving in opposite directions, two solid yellow lines mark the center of the roadway. You may cross these lines only to make a left turn into or from an alley, private road or driveway.

2.147 "No passing"lines are thesingle solid yellow lines used on two-lane pavements to indicate zones where passing is prohibited. You may cross the line only to finish passing a vehicle you started to pass before the beginning of the no-passing zone, or to make a left turn into or from an alley, private road or driveway.

2.148 Other markings such as yellow diagonal stripes are used to mark fixed obstructions. Sometimes solid white lines are used to channel traffic around the hazard.

EPISODE 2.2 Right-of-Way Regulations and Speed Restrictions

EPISODE OBJECTIVE - For given situations and conditions, the student can identify and apply the right-of-way and speed regulations.

2.21 The student can define right-of-way as the right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian approaching under such circumstances of direction, speed, and proximity as to give rise to danger of collision unless one grants precedence to the other.

2.22 The student can list various situations in which drivers must yield to pedestrians.

2.221 When they are in a marked or unmarked crosswalk, if there are no traffic control signals (walk lights or stop-and-go lights). Slow down or stop, if necessary.

2.222 When making a left or right turn at any intersection.

2.223 At stop signs after coming to a complete stop and before proceeding.

2.224 At traffic signals even when the light is green if pedestrians are still in the crosswalk; and also when pedestrians are walking with a green light or a "walk" signal.

2.225 When entering a street or highway from an alley, driveway or private road. You must stop before crossing the sidewalk or sidewalk area.

2.226 You must <u>always</u> come to a complete stop when approaching a blind person who is crossing a street or highway if he is carrying a white cane or being guided by a dog. This is true regardless of any traffic control signs or signals which may be in operation. After stopping, you must still take precautions before proceeding to avoid injuring the blind person.

2.23 The student can list various situations in which drivers must yield to other drivers.

2.231 At intersections where there is a stop sign. You must stop at the marked stop line or, if none, before entering the crosswalk. If there is no stop line or crosswalk, stop before entering the intersection at a point nearest the other road from which you can observe approaching traffic. You may then proceed, but only after yielding the right-of-way to any other vehicle in the intersection or so close to entering it as to make it dangerous.

2.232 If there are no stop signs, yield signs or traffic signals, the driver of the vehicle on the left must yield to the driver of the vehicle on the right if they approach or enter the intersection from different roadways at about the same time.

2.233 If it is a four-way stop intersection, and more than one driver reaches it at almost the same time, the first one to stop should be the first to go--if safe to do so--and the others should take their turns. There are three things to remember:

1. Don't delay traffic behind you--take your turn when it comes up.
2. If another driver tries to take your turn, let him proceed, it might prevent an accident.
3. Due care, courtesy and common sense should govern your actions.

2.234 When making a left turn at an intersection, alley or driveway, you must first yield the right-of-way to traffic from the opposite direction. You may proceed when a safe interval occurs. If in an intersection with a traffic control signal, you may finish your turn even though the light has changed to red. If not yet in the intersection when the light changes to red, you must wait for the next green light.

2.235 When approaching a sign that says MERGING TRAFFIC you must adjust your speed and position to avoid collision with other vehicles.

2.236 When approaching a YIELD sign, slow down to a speed reasonable for existing conditions. If it is necessary to stop for the purpose of safety, follow the procedures outlined for stop signs. If after passing a yield sign you are in a collision at an intersection or interfere with the movement of traffic, this will be considered evidence of your failure to yield the right-of-way.

2.237 At intersections, even after getting a green light, in that they must not proceed until all cross traffic has safely cleared the intersection.

2.238 If you are about to enter or cross a highway from an alley, private road or driveway, you must yield the right-of-way to all other vehicles approaching on the street or highway to be entered.

2.239 You must yield the right-of-way to police vehicles which are using sirens or lights, and to authorized emergency vehicles which are using both sirens and lights. You must pull over to the right-hand edge of the highway and stop, if possible, until the emergency vehicle has passed. Intersections must not be blocked.

2.2310 You must give vehicles in a funeral procession the right-of-way when their headlights are lighted. The driver of the leading vehicle must obey stop signs and traffic-control lights, but when the leading vehicle has crossed the intersection, all other vehicles in the procession may follow cautiously, without stopping. A driver not in a funeral procession may overtake and pass a procession if he can do so without causing a hazard or interfering.

2.24 The student can list various situations in which pedestrians must yield the right-of-way to others using the highway transportation system.

2.241 Pedestrians must obey traffic signals and walk lights, and they must use the right half of the crosswalk when practical. When the steady yellow signal appears pedestrians are not allowed to cross the street, unless otherwise directed by a pedestrian-control signal.

2.242 Pedestrians are not allowed to stand on or next to a roadway to solicit the watching or guarding of any vehicle while parked or about to be parked.

2.243 Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided must yield the right-of-way to all vehicles upon the roadway.

2.244 Pedestrians are prohibited from walking on a roadway if there is a sidewalk next to it. If there is no sidewalk, they must walk on the left side of the pavement or shoulder; and they must step off the pavement when a vehicle approaches.

2.245 Pedestrians are prohibited from standing on any part of the roadway to ask for a ride from the driver of a vehicle.

2.246 Pedestrians are prohibited from standing on or next to a roadway to solicit employment, business or contributions from the occupant of any vehicle, except in a business or residential area.

2.247 Pedestrians who cross at any place other than a marked crosswalk or unmarked crosswalk at an intersection must yield the right-of-way to all vehicles on the roadway.

2.248 It is unlawful for any pedestrian who is under the influence of intoxicating liquor to be upon the highway in Illinois.

2.25 The student realizes that if a policeman directs otherwise, the right-of-way laws do not apply and drivers must do as the officer tells them.

2.26 The student can state the maximum allowable speed in miles per hour (m.p.h.) for the following vehicles.

2.261 Cars and motorcycles: 55 m.p.h.
2.262 Buses: 55 m.p.h.
2.263 Trucks over four tons: 50 m.p.h.
2.264 Trucks under four tons: 55 m.p.h.
2.265 One vehicle towing another: 55 m.p.h.
2.266 Recreational vehicles: 55 m.p.h.

2.27 The student can state the maximum allowable speed (unless otherwise posted) for the following areas.

2.271 Urban areas: 30 m.p.h.
2.272 School zones: 20 m.p.h.
2.273 Alleys: 15 m.p.h.
2.274 Rural highways: 55 m.p.h.
2.275 Expressways: 55 m.p.h.

2.28 The student can list conditions in which speed must be decreased.

2.281 When approaching and crossing an intersection.
2.282 When approaching and going around a curve.
2.283 When approaching the top of a hill.
2.284 When traveling upon a narrow or winding road.
2.285 When hazards exist due to pedestrians, traffic, weather, or road conditions.
2.286 When it is necessary for the purpose of avoiding a collision with pedestrians or other vehicles.

EPISODE 2.3 Laws for Specific Maneuvers

EPISODE OBJECTIVE - The student can apply the laws for various maneuvers in simulated situations or when practice driving.

2.31 The student can state the correct procedures for turning and signaling.

2.311 Turn signals must be given whenever a turn is made to the right or left.

2.312 A continuous turn signal must be given at least 100 feet before turning in a business or residential area.

2.313 A continuous turn signal must be given at least 200 feet before turning in other areas.

2.314 The signal may be given with electric turn signals or by hand and arm.

2.315 For making a right turn, give the proper signal and approach the intersection in the right-hand lane, staying close to the curb. Make the turn in such a way as to end up in the right-hand lane of the street into which you turned.

2.316 For making a left turn move into the farthest lane to the left which is lawfully open to traffic going in your direction. Give the left turn signal, move into the intersection, and yield the right-of-way to all vehicles which are approaching from the opposite direction. After yielding and when safe to do so, proceed with the turn. Whenever practical the turn shall be made to the left of the imaginary center of the intersection. The turn must be made into the lane lawfully available to traffic moving in the same direction as you.

2.317 U-turns must not be made near curves or hills or anywhere where the visibility in each direction is less than 500 feet.

U-turns are often prohibited in local areas by city ordinance.

2.32 The student can list the various safety rules for passing and lane usage.

2.321 Passing on the left is permitted on a two-lane, two-way roadway when the left lane is clearly visible and free of oncoming traffic for a sufficient distance to permit passing without interfering with the safe operation of any vehicle. You must return to your lane before you get within 200 feet of an approaching vehicle.

2.322 Passing is prohibited on a two-lane, two-way roadway in areas marked for no passing by a solid yellow line or a "Do Not Pass" sign; on a hill or curve where it is not possible to see oncoming vehicles which might be close enough to be a hazard; and within 100 feet of an intersection or railroad crossing.

2.323 Passing on the right is permitted when it is safe to do so on a two-lane roadway when there is enough room and the vehicle being overtaken is making or about to make a left turn; when on a one-way street or a roadway with two or more unobstructed lanes in each direction; and at intersections where the pavement has been widened for this purpose.

2.324 Passing on the right is prohibited if the shoulder of the road must be used.

2.325 Driving should always be done on the right half of the roadway except when overtaking and passing another vehicle proceeding in the same direction; when an obstruction makes it necessary to drive to the left of the center line, but only after yielding the right-of-way to all other vehicles traveling in their proper lanes on the unobstructed part of the highway; upon a roadway divided into three marked lanes for traffic; upon a roadway restructed to one-way traffic; and upon a multilane, two-way highway when authorized to do so by traffic control signs or signals

or when making a left turn into an alley, private road, or driveway.

2.33 The student can state the traffic laws which regulate the stopping, standing, and parking of vehicles.

2.331 Stopping, standing or parking is prohibited (except to avoid other traffic or to obey the law, a police officer or an official traffic control device) on the street side of any parked vehicle; on a sidewalk; within an intersection; on a crosswalk; between a safety zone and the adjacent curb; alongside or opposite a street excavation or obstruction when stopping, standing or parking would obstruct traffic; upon a bridge or overpass, or within a tunnel, underpass or subway; on any railroad tracks; and at any place marked by a no parking sign.

2.332 Standing or parking a vehicle, whether occupied or not (except momentarily to pick up or drop off passengers) is prohibited in front of a public or private driveway; within 15 feet of a fire hydrant; within 20 feet of a crosswalk at an intersection; within 30 feet of a stop sign, yield sign or traffic control signal; within 20 feet of a fire station driveway; and at any place where official signs prohibit standing.

2.333 Parking a vehicle, whether occupied or not (except temporarily to load or unload merchandise or passengers) is prohibited within 50 feet of the nearest rail or a railroad crossing and at any place where official signs prohibit parking.

2.334 After parking a vehicle, the engine must be turned off and the ignition key removed.

2.335 When parking on a hill, the following procedures must be followed:

1. The front wheels must be turned toward the curb or edge of the road except when parking uphill with a curb; then the front wheels are turned away from the curb.
2. The park brake must be set.

2.336 When parking on streets with two-way traffic, unless angle parking is permitted by local ordinance, you must stop in a position in which the right-hand wheels are parallel to and within 12 inches of the curb.

2.337 On a one-way street or roadway, vehicles must be parked in the direction in which traffic is moving, within 12 inches of the right or left curb.

2.34 The student realizes that backing up is prohibited upon any controlled access highway or at any other place unless it can be done safely and without interfering with other vehicles.

Suggested Learning Activities

1. Read the Rules of the Road of the State of Illinois.
2. View a chart with seven different shapes of signs on it and state the general meaning and colors of each type of sign.
3. Present a transparency depicting a four phase traffic signal and state what each phase means.
4. Define the following terms: roadway, highway, intersection, controlled access highway, arterial street, traffic, vehicle, bicycle, motor vehicle, traffic control devices, edgeline, lane line, stop line, crosswalk line, railroad crossing marking, yellow center line, no passing line.
5. List six instances in which drivers must yield to pedestrians.
6. List ten situations in which drivers must yield to other drivers.
7. List eight situations in which pedestrians must yield the right-of-way.
8. Construct a chart depicting speed laws. Show the maximum speed for various areas such as urban areas, rural areas, expressways, school zones, and alleys.
9. Demonstrate the proper method for signalling and making right-hand turns.
10. Demonstrate the proper method for signalling and making left-hand turns.
11. View a film strip showing the correct procedure for passing another vehicle.
12. List at least six areas where stopping, standing, or parking a vehicle is prohibited.
13. Demonstrate the correct procedure for parking uphill and downhill with and without a curb.
14. While driving in the driver education car, practice identifying verbally traffic controls and traffic regulations that apply to HTS scenes several seconds in advance of the car.
15. Answer the study questions on pages 32 and 33 of the Illinois Rules of the Road.

UNIT 3.0 Developing Habits and Skills for Safe Vehicle Operation

UNIT OBJECTIVE - The student can identify and skillfully operate the vehicle control systems, safety devices, and accessories in accordance with safe and efficient procedures; and can define and demonstrate the proper procedures and skills for basic maneuvers.

EPISODE 3.1 Predriving Habits

EPISODE OBJECTIVE - The student can describe and demonstrate the predriving checks and procedure.

3.11 The student examines the car before entering to make sure exterior portions of the car are in working order.

- 3.111 Check for toys or debris near the car.
- 3.112 Make sure the tires are inflated.
- 3.113 Check to see that the exhaust (tailpipe) is clear.
- 3.114 Make sure windows, lights, and outside mirror are clean.

3.12 The student checks traffic and enters the car from the curb side if possible.

3.13 The student follows the correct procedure for preparing the car for movement.

- 3.131 Place key in ignition. Do not start car. By placing the key in the ignition, chances are better that the key will not be lost.
- 3.132 Adjust seat. Proper vision will not be attained unless the seat is comfortable and properly positioned; get a cushion if it is needed.
- 3.133 Adjust head restraint. Position restraint directly behind the middle of the head.
- 3.134 Adjust mirrors. Both inside and outside mirrors should be adjusted after the seat is positioned.
- 3.135 Fasten seat belt and shoulder strap. The belt should fit snuggly. The shoulder strap should have at least one fist space between body and strap. Be sure you are able to release the park brake.

3.136 Check passengers. All doors should be locked and seat belts fastened, if not give verbal command.

3.137 Check ventilation. Air vent opened or closed depending on the weather condition.

3.14 If requested, the student can locate, identify, and state the purpose of the various gauges, controls and accessories.

3.141 Gauges

1. Gasoline gauge.
2. Water temperature gauge.
3. Oil pressure gauge.
4. Speedometer.
5. Odometer
6. Ammeter.

3.142 Controls

1. Steering wheel.
2. Selector level.
3. Accelerator pedal.
4. Foot brake.
5. Parking brake.
6. Ignition switch.

3.143 Accessories

1. Light switches.
2. Mirrors.
3. Windshield wipers.
4. Sun visor.
5. Defroster.
6. Horn.
7. Directional.
8. Seat adjustment lever.
9. Seat belts.

EPISODE 3.2 Starting, Moving, Stopping, and Securing the Car.

EPISODE OBJECTIVE - The student can demonstrate skill in the operation of the vehicle controls for starting, moving, stopping, and securing the car.

3.21 The student can follow the correct procedure for starting the car.

3.211 Park brake on. Depress to floor.

3.212 Place selector lever to "N" or "P". Most cars will start in either park or neutral - be consistent.

3.213 Gas feed. If engine is cold, push accelerator pedal to floor once, then release. With warm engine right foot on accelerator pedal, and use light pressure.

3.214 Ignition on. Turn key full right. Engage starter and release the instant the engine catches.

3.215 Check gauges. Oil and ammeter lights should go out if the engine is running and properly warmed. Check fuel gauge. Be sure the car is at least ¼ full.

3.22 The student can follow the correct procedure for moving the car forward.

3.221 Depress foot brake with right foot. Hold it with light pressure.

3.222 Shift selector lever to "D" position. Hold foot brake down as the car will jerk slightly.

3.223 Release parking brake. Left hand.

3.224 Check mirrors inside and out. Check blind spot, then signal your intentions.

3.225 Check blind spot again.

3.226 Release foot brake. Car will move forward.

3.227 Recheck traffic. Look to front and over rear blind spot.

3.228 Move into nearest traffic lane.

3.229 Check traffic again.

3.2210 Turn signal off.

3.23 The student will demonstrate the correct procedure for stopping the car.

3.231 Check mirrors. Inside and out.

3.232 Signal intentions. Pump brake or use mechanical signal.

3.233 Brake smoothly to stop. Right foot to brake pedal, apply smooth, steady pressure, release pressure slightly just before car stops, then look again.

3.234 Depress brake. Hold firmly until ready to move again.

3.24 The student will demonstrate the correct procedure for securing the car.

3.241 Apply foot on brake and hold.
3.242 Set parking brake. Depress with left foot when the car is completely stopped.
3.243 Shift selector lever to "P" park position.
3.244 Key off and out. Always lock the steering wheel and take the key out.
3.245 Unfasten seat belt and shoulder strap.
3.246 Check traffic before opening the door. Check mirrors and blind spot.
3.247 Lock doors. Exit from curb side whenever possible.

EPISODE 3.3 Procedures and Skills for Basic Maneuvers

EPISODE OBJECTIVE - The student can demonstrate skill in performing such basic maneuvers as right turns, left turns, backing, lane changing, turnabouts, and parking.

3.31 The student can demonstrate the correct procedure for making a basic right turn.

3.311 Position car in right lane well in advance if not in the proper lane, check traffic to rear by use of both mirrors, check blind spot and signal your intentions.
3.312 Check traffic. Continuous check including both mirrors.
3.313 Signal. At least 100 feet in advance of turn in city and 200 feet in advance on rural or expressway areas.
3.314 Place right hand near top of wheel. 12 o'clock position.
3.315 Brake with right foot. Slow down as much as necessary.
3.316 Check traffic again. Look left, right, left, Check for pedestrians and yield right-of-way to them.

3.317 Turn hand-over-hand when curve begins.
3.318 Release brake slightly.
3.319 Look up intended path of travel.
3.3110 Unwind steering wheel naturally.
3.3111 Accelerate gradually about halfway around turn while simultaneously letting wheel slip back to center steer position.
3.3112 Resume safe speed - check traffic.

3.32 The student can demonstrate the correct procedure for making a basic left turn.

3.321 Get in proper lane.
3.322 Check traffic. Continuous check including both mirrors.
3.323 Signal. At least 100 feet in advance of turn in city and 200 feet in rural or expressway areas.
3.324 Place right hand at 12 o'clock position.
3.325 Brake with right foot. Slow down as necessary.
3.326 Check traffic again. Left, right, left.
3.327 Check for pedestrians and other vehicles.
3.328 Turn hand-over-hand.
3.329 Release foot brake; look up intended path of travel; unwind steering wheel.
3.3210 Accelerate gradually about halfway around turn.
3.3211 Resume safe speed, check traffic.

3.33 The student can demonstrate the correct procedure for backing up.

3.331 Right foot on brake firmly.
3.332 Shift to Reverse, "R."
3.333 Release park brake.
3.334 Check traffic; front, sides and rear.
3.335 Left hand at top of wheel, right arm on back rest.
3.336 Turn body so as to look over right shoulder through rear window.
3.337 Ease off brake. Car will start to move; feel gas slightly.
3.338 Turn steering wheel in the direction you wish rear of car to go. Turn hand-over-hand.
3.339 Keep looking rear until car comes to complete stop.

3.34 The student can demonstrate the correct procedure for making a lane change.

3.341 Check mirrors, in and out.
3.342 Signal intentions.
3.343 Check blind spot. Glance in direction you intend to turn.
3.344 Decide if safe.
3.345 Accelerate slightly, checking traffic again; looking over traffic and make slight turn.
3.346 Turn off signal indicator.
3.347 Maintain safe speed and proper lane position; center of intended path.

3.35 The student can demonstrate the correct procedure for making a U-turn.

3.351 Signal right.
3.352 Bring car to a complete stop 6 to 12 inches from curb.
3.353 Depress foot brake.
3.354 Check mirrors, inside and out; check intended path for obstacles.
3.355 Check left rear blind spot.
3.356 Signal intentions to turn left.
3.357 Release brake and move car slowly turning hard left.
3.358 Allow adequate space cushion on right when turning.
3.359 Cover brake when approaching opposite curve.
3.3510 Check traffic; complete the turn.
3.3511 Accelerate to proper speed.
3.3512 Maintain proper lane position.

3.36 The student can demonstrate the correct procedure for making a Y-turn (three point turn).

3.361 Same procedures as pulling into curb as stated in U-turn above.
3.362 Same procedures as pulling away from curb as states in U-turn above.
3.363 Check blind spot, over left shoulder.

3.364 Move car slowly, at same time steer hard left.
3.365 Brake gently, as car crosses center line; center of road.
3.366 Steer hard right when car is four feet from curb.
3.367 Stop before or with touching of curb.
3.368 Shift to Reverse, cover brake.
3.369 Check traffic in both directions.
3.3610 Look back over right shoulder through rear window; assume proper backing position.
3.3611 Accelerate slowly and move car.
3.3612 Steer hard right.
3.3613 Brake gently as car crosses center line; center of road.
3.3614 Steer hard left, look over left shoulder.
3.3615 Stop before or with touching of curb.
3.3616 Shift selector lever to "D" position.
3.3617 Check traffic both left and right.
3.3618 Steer left and accelerate to proper speed.
3.3619 Resume proper lane position.

3.37 The student can demonstrate the correct procedure for performing an intersection turnabout with a minor street on the left.

3.371 Check traffic in mirrors.
3.372 Signal intention left, check side street to enter.
3.373 Reduce speed.
3.374 Check side street and new lane to enter. Check traffic that is oncoming.
3.375 Move into correct lane, if not marked, pull along side curb.
3.376 Use correct hand-over-hand steering, left.
3.377 Come to complete stop along curb.
3.378 Shift to reverse, maintain foot position on foot brake.
3.379 Check traffic conditions, use mirrors, checking blind spot, also checking to right of car.
3.3710 Back slowly straight back.
3.3711 Stop at sidewalk, make sure you sound your horn.
3.3712 Check for pedestrians.
3.3713 Back slowly to street's edge and come to complete stop, checking traffic after stop.

3.3714 Use correct lane of traffic, right.
3.3715 Enter correct lane of traffic, right side.
3.3716 Continue to look back until complete stop.
3.3717 Check traffic and shift to drive.
3.3718 Resume safe speed.

3.38 The student can demonstrate the correct procedure for performing an intersection turnabout with a minor road on the right.

3.381 Check traffic in mirrors.
3.382 Signal intention to right.
3.383 Reduce speed.
3.384 Stop car about two feet from curb. Be sure not to block a visible or invisible crosswalk.
3.385 Check side street for cars or other potential obstacles.
3.386 Shift to reverse, "R."
3.387 Assume backing position.
3.388 Begin backing slowly.
3.389 Turn hand-over-hand to right while backing.
3.3810 Stop car after backing, do not block crosswalk.
3.3811 Shift to drive, "D."
3.3812 Signal left.
3.3813 Turn hand-over-hand to left being sure to enter proper lane.
3.3814 Resume proper lane position and safe speed.

3.39 The student can demonstrate the correct procedure for diagonal parking, to the right. The procedure includes both the approach to the diagonal parking spot and exit from the space.

3.391 Approach:

1. Position car as far left as possible.
2. Check traffic and brake gently.
3. Signal intentions, right.
4. Slow to safe speed for entrance.
5. When front wheels are opposite the nearest edge of the parking space, stop and check space before pulling into it.

6. Steer right using correct hand-over-hand steering method.
7. As car moves into center of space, straighten wheels.
8. Continue forward slowly.
9. Stop before touching curb.
10. Set park brake.
11. Shift to park, "P."

3.392 Exit:

1. Shift to reverse, holding foot brake; release parking brake.
2. Turn on directional signal of fender which is fartherest into traffic.
3. Check traffic to rear continuously while you;
4. Back slowly CAUTIOUSLY, maintain straight position.
5. Stop and check traffic both left and right.
6. Continue backing when front bumper clears rear bumper of car on your left.
7. Steer hard right.
8. Back into the lane you will be travelling in, and pre-set the wheels before stopping. Keep looking back until coming to complete stop.
9. Shift to drive, "D."
10. Check traffic.
11. Accelerate to proper speed.

3.40 The student can demonstrate the correct procedure for diagonal parking to the left. This procedure also includes both the approach and exit.

3.401 Approach:

1. Check traffic and brake gently.
2. Signal intentions, left.
3. Position car in right lane and continue to slow down.
4. When front wheels are opposite the nearest edge of the parking space, stop and check space before pulling into it.

5. Steer left using correct hand-over-hand steering method.
6. Check oncoming traffic.
7. Straighten wheels as car moves into center of space.
8. Continue forward slowly.
9. Stop before touching curb.

3.402 Exit:

1. Shift to reverse, holding foot brake; release park brake.
2. Turn on directional signal of fender which is farther**est** into traffic.
3. Check traffic to rear continuously while you;
4. Back slowly CAUTIOUSLY, maintain straight position.
5. Stop and check traffic both left and right.
6. Continue backing, when front bumper clears rear bumper of car on right.
7. Steer hard left, remember to steer in the direction you want back of your car to go.
8. Back into lane you will use for travel and pre-set your wheels before coming to complete stop.
9. Shift to drive, "D."
10. Check traffic.
11. Accelerate to proper speed.

3.41 The student can demonstrate the correct procedure for approaching, entering, and leaving a parallel parking space.

3.411 Approach:

1. Approach in correct lane.
2. Reduce speed; use brake lights to signal stop.
3. Signal right, slow down.
4. Pull up alongside car in front of parking space, two to three feet away.

5. Position back bumper of your car even with back bumper of the car in front of your intended parking space.

3.412 Entering:

1. Shift to reverse.
2. Check traffic.
3. Back slowly maintaining controlled speed.
4. Steer right looking over right shoulder when you see the tail lights on rear bumper of the car in front of you.
5. Turn wheels left maintaining slow speed until car is nearly parallel to curb.
6. Straighten wheels.
7. Stop before touching car behind you.
8. Shift to drive, "D", and center car in parking space approximately six inches from curb.

3.413 Leaving:

1. Start engine and shift to reverse.
2. Back slowly while looking over right shoulder.
3. Stop before touching car behind you.
4. Shift to drive, "D."
5. Signal intentions and check traffic; be sure to check left rear blind spot.
6. Steer hard left when leaving to clear car in front.
7. Maintain slow safe speed.
8. Recheck traffic over left shoulder.
9. Accelerate to safe speed into nearest traffic lane.

3.42 The student can demonstrate the correct procedure for parking uphill with a curb. The procedure includes both entering and leaving the parking space.

3.421 Entering:

1. Check traffic and signal for stop.
2. Signal right and slow down.
3. Pull over to within six inches of curb.
4. Stop.
5. Move car forward slowly turning wheels away from the curb, wheels turned left.
6. Shift to reverse and back slowly until touching curb.
7. Important: Keep foot on the brake to control speed.
8. Shift to park, "P" and set parking brake.
9. Engine off.

3.422 Leaving:

1. Follow regular procedures for starting and leaving curb.
2. Accelerate slowly and remember to turn the wheels right, wheels had been turned left.
3. Take more gas to gain speed.

3.43 The student can demonstrate the correct procedure for parking downhill with a curb. This procedure also includes both entering and leaving the parking space.

3.431 Entering:

1. Check traffic and signal for stop.
2. Signal right and slow down.
3. Pull over to within six inches of curb.
4. Stop.
5. Let car roll slowly forward, turning wheels toward curb until the tire touches the curb.
6. Put selector lever in park, "P" and set parking brake.
7. Engine off.

3.432 Leaving:

1. Follow regular procedures for starting and leaving curb.

2. HOWEVER, remember to shift to reverse and back slowly turning wheels left
3. Check traffic; shift to drive, "D."
4. Accelerate into proper lane after signal of intentions and check traffic over shoulder.

Suggested Learning Activities

1. Develop a checklist of predriving habits including the exterior examination of the car, entering the car, and preparing to start the car.
2. Identify and discuss the purpose of the various gauges, controls, and accessories in the driver education car.
3. View a film depicting the correct procedures for starting, moving, stopping, and securing the car.
4. Practice starting, moving, stopping, and securing the driver education car.
5. Discuss the procedures for right turns, left turns, lane changes, backing, turnabouts, and parking while showing these procedures on a magnetic board.
6. Write a short paper on the differences of making right and left turns in traffic.
7. Practice turns, lane changes, backing, turnabouts, and parking in the driver education car.
8. Read chapters 2 and 3, pages 15-88, of Sportsmanlike Driving, 7th Edition.

MODEL CURRICULUM FOR COMMERCIAL DRIVING SCHOOLS

PART III

Driving Strategies and Tactics

UNIT 4.0 Perception of System Events

UNIT OBJECTIVE - The student is able to demonstrate the ability to observe and recognize, in an efficient and effective manner, the pertinent HTS events and conditions for vehicle guidance along selected routes.

EPISODE 4.1 Nature of Sensory Perception

EPISODE OBJECTIVE - The student can identify and define the capabilities required for efficient sensory perception.

4.11 The student can define sensory perception as the detection of stimuli through one or more of the various senses such as sight, hearing, feeling, smell, taste or balance.

4.111 Seeing or perceiving is a process which involves our mind and senses and results in the attachment of meaning to given stimuli

4.112 Perceiving traffic situations consists of identifying each component element for what it is and what the thing is actually doing, and recognizing the relationship and interactions among various elements or events.

4.113 Perception is dependent upon the reception or observation of sensory data, the awareness and selection of events, and the organization and identification of data.

4.12 The student can list the principles of perception.

4.121 Seeing or perceiving traffic situations is a process which involves our mind and senses (primarily eyes); the brain must interpret the sensory data or information received and selected.

4.122 The mind can interpret and analyze only that on which we concentrate or give our attention to or become aware of.

4.123 Since we can't perceive all that is observed, perception must be a selective process.

4.124 The eyes can transmit millions of impulses in seconds but the brain can handle only a limited number of observations in a given period.

4.125 We perceive best that which is meaningful.

4.126 The more perceptive a person becomes, the more efficient will be his motor skills.

4.127 The more closely that our perception describes the events, as they really are, the more accurate will be the outcome of the subsequent operations to be performed.

4.128 If we are looking for a certain event, we are not likely to see much else.

4.129 The things we are taught to look for, we will see first and not much else.

4.1210 How well we perceive, as well as what we see, depends to a great extent on previous learning.

4.13 The student can define the following terms pertaining to visual capabilities and limitations.

4.131 Visual acuity: being able to see an object sharply and distinctly, both near and far.

4.132 Depth perception: The ability to judge the distance between yourself and other things, especially when both are moving.

4.133 Color vision: the ability to tell one color from another, expecially red, green, and yellow.

4.134 Night vision: the ability to see in low illumination.

4.135 Glare resistance: the ability to see in spite of glare at night.

4.136 Glare recovery: the ability to see after being blinded by a strong light.

4.137 Central vision: the narrow cone of vision used when we concentrate on things.

4.138 Peripheral vision: the upper, lower and side parts of our eyesight.

EPISODE 4.2 Principles for Efficient Observation and Perception

EPISODE OBJECTIVE - The student can state and illustrate the principles and techniques for improving his visual perception of traffic events.

4.21 The student can list capabilities of good visual habits as they relate to the driving task.

4.211 Good visual habits lengthen the perceptual distance which allows more time for decisions and actions.

4.212 Good visual habits assist, automatically, in control of the car even though the driver is momentarily distracted at times.

4.213 Good visual habits build up a strong resistance to distracting events.

4.214 Good visual habits reduce physical and mental strain which in turn reduces fatigue.

4.215 Good visual habits give the driver a feeling of security and assurance.

4.22 The student can list the proper procedure for focusing well ahead on the center of the path.

4.221 Focus central vision, both far and near, down the middle of the lane selected.

4.222 When lanes are marked, glance in the left outside rearview mirror and along left front fender to check the distance the side of the car is from road marking. Also, the instructor should tell the distance the right side of the car is from lane marking or edge of roadway. When space is limited, the car should be kept as close as possible to objects on the left side. Lanes are a minimum of nine feet and are usually 10 to 12 feet wide when marked.

4.223 When lanes are not marked, imagine a carpet the width of this car, (6 to 7 feet) unrolling ahead of the car. Trucks and buses may be up to 8 feet wide.

4.224 Use the center of the pathway as a main point of reference, but never allow your central vision to become fixed there.

4.225 To develop the 12 second visual lead or aim high habit, pick out a stationary feature of the roadway or some roadside object ahead at about the distance you usually look to. Then count the time in seconds that it takes for the front of your car to pass the selected point. The time elapsed should equal or exceed twelve seconds. (at least a block in town, and ¼ mile in rural areas.)

4.226 When turning corners, aim high for the center of the intended path. Look through the turn.

4.227 When parking parallel to a curb, imagine a pathway the width of your car and next to the curb. Then line up the middle of your car with the middle of this pathway.

4.228 Use roadway marking, other cars and objects as secondary points or reference. (use quick glance only)

4.229 Put forth a determined effort to make greater use of fringe vision when focusing on the center of your intended pathway.

4.23 The student can identify and practice the proper procedures for scanning and searching the traffic scene.

4.231 Move the eyes regularly, in sweeping action, to each sector of the traffic scene. Pause only a second or two on any one object.

4.232 Concentrate on the various sectors in proportion to the number of events or likelihood of hazards.

4.233 The search rate and pattern should vary with traffic conditions.

4.234 Use the ground viewing habit. Scan near and far as well as to both sides.

4.235 Look through the glass areas of other vehicles for objects and events.

EPISODE 4.3 Identifying Significant HTS Events and Potential Hazards

EPISODE OBJECTIVE - The student can demonstrate efficient visual habits for recognizing key events and potential hazards in given traffic situations.

4.31 The student can state the principles and rationale for developing an efficient method for selecting and interpreting (classification) the many elements of the HTS scene.

4.311 Association --Perception is a process of matching what comes into sensory centers with what is already on file. Associating or relating things to each other aids in matching and remembering. A person would be encouraged to keep his stored information file active and up-to-date.

4.312 Experience--We tend to organize what we perceive in line with what past experience has taught us to expect. How well we perceive depends to a

great extent on previous learning knowledge. An increase in our knowledge of a situation tends to facilitate recognition of that situation in the future. Unfamiliar signs or events require longer to recognize.

4.313 Set to Perceive--The selection and organization of incoming data into meaningful relationships takes time. However, a minimum of time is consumed if we are set to perceive or know what to look for. Mental "sets" can be created by repetition and learning. The things we are taught to look for, we will see first; we tend to see what we expect to see.

4.314 Structure--Things tend to be perceived in a structural form that is orderly, in good balance and that is sensible.

4.315 Meaning--We perceive best and quickest that which is meaningful. A background of perceptual reference can be built up.

4.316 Selectivity--Grouping aids in theselection process and helps insure that we do not overlook the significant events.

4.317 Importance--When there are a number of continuous events occurring simultaneously, the driver's attention is usually divided among them in proportion to their relative importance to him.

4.318 Efficiency--It is most efficient to deal with several things in an orderly and systematic way; therefore, we should organize the traffic elements into similar groups.

4.32 The student can demonstrate correct procedures and practices for classifying key events and potential hazards.

4.321 When scanning the traffic scene, search for elements relating to each classification.

4.322 For each class of elements, seek an answer to the four questions: (a) What is it? (b) Where is it? (c) What is its condition? (d) What is it doing?

4.323 Build up a store of information about what to look for or expect for each class of elements.

4.324 Use commentary driving to identify verbally significant events and cues observed.

4.325 Make a list of all the significant HTS events for (a) a given intersection (b) a city block, and (c) a given segment of a rural highway.

Suggested Learning Activities

1. Describe some of the driving sensations experienced by the motor vehicle driver while operating a vehicle.
2. Discuss the application of principles for perception to a systematic method for efficient and effective identification of HTS events.
3. Define and describe the relationship to the driving task of the following terms pertaining to visual capabilities and limitations: visual acuity, depth perception, color vision, night vision, glare resistance, glare recovery, central vision, and peripheral vision.
4. Discuss various ways for grouping or classifying HTS events and objects.
5. View simulation films and identify significant events.
6. Practice visual habits in the driver education car. A watch with a second hand can be used to check eye movements and visual lead time.
7. Use commentary driving technique to give feedback on visual habits while practicing in the driver education car. Answer questions related to visual cues being observed.

UNIT 5.0 Judgment of System Events

UNIT OBJECTIVE - The student is able to demonstrate the ability to judge pertinent HTS events and conditions for vehicle guidance along selected routes.

EPISODE 5.1 Concepts and Principles for Improvement of Judgmental Abilities

EPISODE OBJECTIVE - The student can explain or illustrate the applications of principles related to the judgment of traffic events.

5.11 The student can define evaluation and judgment and discern between the two terms.

5.111 Evaluation is the act of making decisions about the value of ideas, works, and solutions.

5.112 Judgment is the ability to make decisions, comparisons, and estimations of quality and quantity about situations.

5.113 Evaluations are generally based on a sound basis of knowledge whereas judgment is the choice between two or more actions not necessarily based on habits or prior practice.

5.12 The student can explain the differences between threats, hazards, and risks.

5.121 Threat is an indication of a menacing condition.

5.122 Hazard is an object or event outside the driver that may be a possible source of danger.

5.123 Risk is the possibility of injury or damage.

5.13 The student will demonstrate the ability to "assume the worst" by preparing in advance for hazardous situations through such methods as separating and compromising and reduction and minimization.

5.131 Separating risks is a means of distinguishing or being able to identify different risks and hazards involved in driving situations and adjusting speed to separate the conflicts.

5.132 Compromising is a means of allowing a space cushion between your car and the hazards creating the greatest danger.

5.133 Reduction and minimization is the process of eliminating as many hazards as possible, thus minimizing

the key dangers left. This eliminates the need for consideration of those possibilities that cannot affect the driver in an adverse manner.

EPISODE 5.2 Evaluation of Highway Characteristics, Traffic Controls, and Weather Conditions

EPISODE OBJECTIVE - The student can identify and evaluate the hazards and risks for given traffic situations.

5.21 The student can demonstrate the ability to judge traffic situations in terms of the degree of hazard present.

5.211 Immediate hazard is a hazard that is occurring at the present time and within close range.

5.212 Potential hazard is an event or object that may become an immediate hazard.

5.22 The student can identify conditions or situations in the traffic scene which are potential hazards.

5.221 Some conditions affect directional control, braking, or loss of control.

5.222 Certain conditions or objects obstruct one's view of the traffic scene or limit the space needed for easier maneuvers.

5.223 Changes occur in roadway geometry, weather conditions, signal control devices, and traffic flow or density.

5.224 Accident "trap" situations occur when the driver unknowingly drives into a potential accident producing situation where evasive movement is severely limited.

EPISODE 5.3 Prediction of Actions of Other Highway Users

EPISODE OBJECTIVE - The student can evaluate and predict what other traffic units may most likely do in given traffic situations.

5.31 The student relies on his knowledge of human limitations in avoiding hazardous situations which may arise in given traffic situations.

5.311 Skilled reactions tend to become disorganized when the operator is surprised by a hazard or is under emotional stress.

5.312 Errors can be expected in human beings.
5.313 Age and condition of other users can influence traffic situations.

5.32 The student weighs the probability and consequences in responding safely to given traffic situations.

5.321 Probability refers to the chance that an actual collision course will develop.
5.322 Consequences refer to the results of such a decision.
5.323 In rare instances, the probability of a collision may be so great that the driver must choose the least damaging consequence.

EPISODE 5.4 Estimation of Spatial Relationships

EPISODE OBJECTIVE - The student can demonstrate the ability to make appropriate time-speed-distance estimates for the optimum operation of his motor vehicle in the HTS.

5.41 The student can define and state the differences between simple, complex, and discriminative reactions.

5.411 In simple reactions, a person is set to do some simple response when an expected simulus occurs. The mind is made up in advance when the situation is perceived.
5.412 Complex reactions occur when any of several stimuli call for appropriate one of several responses.
5.413 Discriminative reactions occur when a person is required to make a choice between two or more actions which are not habitual or practiced, thus not requiring the exercise of judgment.

5.42 The student can list general guidelines for distance judgment and changing spatial relationships.

5.421 The larger the image, the closer an object seems.
5.422 Haze and fog increase the apparent distance.
5.423 Since the brightness of an object depends upon the contrast with its background, objects of equal brightness appear closer at night.
5.424 Dimness (and blurredness) tend to make objects appear further away than they actually are.
5.425 Objects far away tend to appear larger than they are.
5.426 Head movements can assist in judging relative distances.

5.43 The student can explain and demonstrate the calculation of the 2-12 adjust system.

5.431 The two seconds stands for the interval between your car and the car in front of you. While driving at higher speeds you may want to increase the distance to 3 or 4 seconds. The way to calculate the 2 seconds is by picking out a stationary object in your path ahead. When the tail end of the car in front passes that object you count "1000-one, 1000-two." If your car's front end reaches the object before you have counted to 1000-two, then you are following too close.

5.432 The 12 seconds stands for how far ahead your eyes should be looking down the road. The way to calculate this is by picking out a stationary object in your path ahead and starting the count "1000-one, 1000-two..." until you reach 1000-twelve at which time the front end of your vehicle should be even with this object. If you have reached this object before you have reached 1000-twelve you are not looking far enough down the road.

5.433 The adjust means how you adjust the position of your vehicle within the traffic pattern. You can do this by accelerating, braking, or steering to safely adjust your position.

Suggested Learning Activities

1. Explain the difference between evaluation and judgment.
2. View several slides depicting several problem traffic situations. Explain how separating and compromising the various hazards can reduce the chances of a collision.
3. Write a short paper discussing the differences between simple, complex, and discriminative reactions.
4. As an observer in the driver education car, verbally identify the immediate and potential hazards one block in advance when requested.
5. As an observer in the driver education car, make estimates of other vehicle speeds.
6. While driving in the driver education car, practice following the 2-12 adjust concept.

UNIT 6.0 Decision Making for Safe Driving

UNIT OBJECTIVE - The student is able to determine an appropriate plan of action, including strategies and tactics required to carry out the plan, for various traffic situations that are to be encountered under varying conditions and contingencies.

EPISODE 6.1 Principles and Procedures for Making Driving Decisions

EPISODE OBJECTIVE- The student can identify and illustrate principles and procedures for safe and efficient decision-making while driving.

6.11 The student can list and describe the key elements of driving strategy.

6.111 Driving strategy is the art of planning and directing operations.
6.112 It is the formation ahead of time of a plan of action.
6.113 It involves maneuvering the vehicle in such an advantageous position, so that if a hazard does appear or develop, the driver can cope with it successfully.

6.12 The student can define driving tactics.

6.121 Driving tactics are the procedures or actions taken in accord with the plan or strategy.
6.122 They involve the skillful methods for achieving the goal.

6.13 The student can define defensive driving as the art of driving so as to protect yourself from the hazards of various traffic situations.

6.131 Driver errors can create these hazards.
6.132 Roadway changes can create hazards.
6.133 Vehicle failure can create hazards.

6.14 The student can explain the meaning of buffer zone or space cushion.

6.141 Buffer zone or space cushion is an imaginary protective space that extends to all sides of your car.
6.142 Its size and shape varies with the traffic conditions, stopping distance, and swerving space.

6.15 The student can define decision-making as the mental process a driver goes through in each driving decision that is not automatic or almost so.

6.16 The student can list and discuss principles for efficient decision-making.

6.161 **Analysis of input information and stored rules-Decision-making is dependent upon the quantity and quality of information, both incoming and stored.**

6.162 Practiced habits for simple and routine decision-Simple and routine decisions should be habituated, thus, allowing more time for the brain to process the more difficult and infrequent complex decisions.

6.163 "Familiar" versus "unfamiliar" situations-Decision-making in unfamiliar situations is more difficult and requires more time.

6.164 Number and difficulty of choices-The capability of the brain to make rapid decisions decreases in proportion to the number of choices and complexity of the situation.

6.165 It is more efficient to deal with several things in an orderly and systematic way; therefore, grouping by similarity is recommended.

6.166 Planned responses-The objective of all strategy is to prepare a response in advance so the driver will not be forced into an unplanned reaction. The lack of preparation increases the probability of an error with insufficient time to make the proper response. The emotional impact of an immediate response from an unprepared driver markedly increases the frequency of driver panic.

6.17 The student can list general strategies for dealing with traffic hazards.

6.171 Select actions that eliminate or reduce the number of hazards.

6.172 Select actions that minimize the significant hazards.

6.173 Select compromise solutions for conflicting responses.

6.174 Avoid creating or becoming a hazard to others.

6.18 The student can list, discuss, and demonstrate the IPDE Concept for developing driving competency through efficient perception, judgment, and decision making.

6.181 I - Identify the situation at hand. Look for potential driving hazards (Parked cars, pedestrians, children and their toys, rolling balls, etc.).

6.182 P - Predict what may happen, predict the possible action of the identified objects (will the car pull out? will the pedestrian move into your path? will someone follow the ball into the street?).

6.183 D - Decide what to do. Decide what action to take, decelerate gradually or quickly, stop quickly or gradually, swerve, etc.).

6.184 E - Execute your decision. Perform the action you decided to take.

EPISODE 6.2 Driving Decisions for Various Traffic Situations

EPISODE OBJECTIVE - The student can apply strategies and tactics for various situations to be encountered in driving.

6.21 The student can list the five steps included in the "Smith System", discuss these steps as they relate to safe driving, and demonstrate the steps while driving.

6.211 Aim High in Steering. Look well ahead of your intended path. Analyze traffic conditions before you get to any point of potential conflict.

6.212 Get the Big Picture. Be aware of both sights and sounds that are around your vehicle. Make every attempt to see visually everybody and everything that is coming into your view.

6.213 Keep Your Eyes Moving. Move your eyes to look near, far ahead, to both sides, and in your rearview and outside mirrors. Keep your eyes moving in order to spot approaching traffic hazards and have more time to adjust to them safely and also to keep your eyes from getting tired.

6.214 Make Sure You are Seen. Use various controls such as your horn, headlights, taillights, brake lights, turn signals, hand signals, and emergency flashers, as well as eye contact to make sure other drivers and pedestrians see your vehicle.

6.215 Leave Yourself an Out. Leave yourself an escape route. Practice space cushion driving avoiding accident trap situations. Always allow adequate following distance.

6.22 The student can demonstrate the correct procedure for safely moving within the traffic environment.

6.221 The student selects a lane of travel which gives him a space cushion, proper direction and traffic flow, and good visibility.

6.222 The student changes lanes carefully, checking blindspot and signalling.

6.223 The student selects a speed which allows him to blend with the traffic flow, maintain space cushion, avoid hazards, and allow time for control actions.

6.23 The student can demonstrate the correct procedure for safely moving through intersections.

6.231 The student slows and "covers his brake" when approaching an intersection.

6.232 The student yields to other traffic, if necessary, even if he has the right of way.

6.233 When turning at an intersection, the student places his vehicle into the proper lane, signals his intentions, checks traffic (looking around the turn also), slows, and proceeds with the turn when it is safe to do so.

6.24 The student can demonstrate the correct procedure for entering, driving on, and exiting an expressway (freeway).

6.241 Entering Expressway:

1. Locate entrance ramp by locating sign to freeway well in advance.
2. Check traffic and blind spot.
3. Signal intentions to enter ramp right.
4. Assume ramp speed.
5. Gradually increase speed.
6. Check for opening (gap).
7. Signal intentions for entrance to freeway.
8. Adjust speed to merge with gap.
9. Turn signal off and adjust to freeway speed.

6.242 Driving on Expressways:

1. Match speed of other drivers.
2. Maintain a safe following distance (two second interval rule applies).
3. Check well down your lane (aiming high in steering).

4. Always signal for lane changes.
5. Follow all posted speed limits.

6.243 Leaving Expressway:

1. Locate and read all signs.
2. Get in proper lane well in advance.
3. Check mirrors constantly.
4. Signal intentions.
5. Enter ramp and assume safe ramp speed.
6. Slow to posted exit ramp speed.
7. Brake before reaching curved portion of ramp.
8. Remember you are entering a new flow of traffic, different surface conditions and traffic volume.
9. Assume safe speed.

6.25 The student can demonstrate the correct procedure for passing and being passed.

6.251 Passing:

1. Check traffic ahead while maintaining safe following distance.
2. Check mirrors.
3. Signal intentions to pass.
4. Check your blind spot over shoulder.
5. Decision point; is it safe to pass?
6. Accelerate gradually (slight turn, increase speed 10 to 15 mph faster than the car you are passing).
7. Tap horn when almost alongside car being passed.
8. Check car in mirror when full view of passed car is gained.
9. Signal intentions.
10. Check blind spot to verify enough room.
11. Move into correct lane.
12. Turn indicator off and resume safe speed.

6.252 Being passed:

1. Maintain speed.
2. Maintain lane position
3. Be prepared to take evasive action if passing car encroaches upon the path of your car.

6.26 The student can demonstrate the correct procedure for handling unusual traffic situations that commonly occur within the HTS.

6.261 Unusual traffic situations due to other driver errors.

1. False signal - Never assume that another car is turning just because his signal is on. Always allow adequate space to maneuver if the signalling vehicle does not turn.
2. Tailgating - Change lanes or speed up if possible to avoid this problem; otherwise, wave the tailgating driver back.
3. Car approaching in your lane - Steer to the shoulder of the road to avoid this hazard.

6.262 Unusual traffic situations due to driver control problems.

1. If your car runs off the road, grip the wheel firmly; the shoulder, which is not as smooth as the pavement, will tend to turn your front wheels to the right. If only your front wheel drops off the pavement, steer so that both front and back wheels are on the shoulder. Do not turn sharply back onto the pavement because this might cause your car to skid or swerve. Ease upon the accelerator and slow down gradually. When speed is greatly reduce, brake gently so as not to skid. When you have slowed down, and cars are not coming either way, signal and ease back onto the pavement.
2. If your car goes into a skid, do not apply the brakes. Follow your impulse to keep the car going straight. Steer in the direction of the skid to bring the front of the car in line with the back, straighten the wheels. Release the accelerator gradually and be prepared for a second skid.

6.263 Unusual traffic situations due to vehicle failure.

1. If a blowout occurs, grasp the steering wheel firmly with both hands. Remain calm and do not slam on the brakes. Steer in a straight line and reduce your speed gradually by removing foot from accelerator. Apply brakes gently after speed is reduced. Check traffic, signal, and ease the car off the road.
2. If the accelerator pedal jams, try to free the pedal by raising it with your foot if there is no immediate danger. Shift the car to neutral and quickly, but safely, slow down, signal, check traffic, and pull off the road. Turn the engine off.

3. If brake failure occurs, pump brakes to build up pressure in the brake line. If this fails, hold parking brake release and slowly apply parking brake. Downshift your car so drag of engine will slow your car down. Pull off the road by using proper procedures to get out of the line of traffic.
4. If a power steering failure occurs, check the steering wheel as it will be rather difficult to turn. Grip the wheel firmly, reduce speed, and proceed at once to a garage for repairs.
5. If a lighting failure occurs, slow down immediately. Flash your brake lights and pull off the road. Call for assistance if you cannot locate the trouble.
6. If the engine stalls, you should steer safely out of the line of traffic, then try to restart the engine. Be aware that if you are driving a car with power steering, the power steering will fail when the engine stalls.

6.27 The student can demonstrate proper procedures for driving under adverse conditions.

6.271 The student can demonstrate pre-driving habits for driving in snow, ice, and frost conditions.

1. Clear car's windows and mirrors.
2. Clear the windshield.
3. Make sure windshield wipers are not frozen to windshield.
4. Clear hood to prevent snow from blowing on windshield.
5. Clear headlights and tail lights.
6. Provide adequate ventilation.
7. Permit engine to warm up.

6.272 The student can demonstrate proper procedures for putting the car in motion on a snow covered street.

1. Turn on low beam headlights.
2. Depress foot brake.
3. Shift selector lever to "D", however if traction is bad shift to "L".
4. Release parking brake.
5. Check traffic.
6. Signal your intentions.
7. Check blind spots.

8. Release foot brake.
9. Recheck traffic.
10. Accelerate gradually.
11. Move into a safe lane of traffic and maintain a safe speed allowing a much larger space cushion.

6.273 The student can demonstrate the correct procedures for driving safely in the rain.

1. Turn on windshield wipers.
2. Turn on low beam headlights.
3. Adjust your driving to the road surface condition.
4. Reduce speed.
5. Increase your following distance.

6.274 The student can demonstrate the correct procedures for driving in fog areas.

1. Use the low beam headlights.
2. Reduce speed drastically.
3. Sound your horn on approaching pedestrians or parked vehicles.
4. If the fog is too thick, pull over to the side of the road and wait until it clears.
5. If you decide to stop, pump the brakes to warn others of your intentions.

6.275 The student can identify locations where traction may be lost due to weather conditions.

1. Snow packed intersections
2. Snow packed inclines
3. Patches of snow and ice on bridges
4. Over and underpasses
5. Shady areas
6. Muddy areas
7. Melting snow areas where ice may form
8. Areas where wet leaves accumulate

6.28 The student can describe emergency situations as instances in which a collision can no longer be avoided. The driver has lost the ability, time, and or space necessary to avoid a collision course.

6.281 When approaching an emergency situation, the student grips the wheel firmly (at 9 and 3) and is prepared to steer and/or brake quickly to avoid an immediate hazard.

6.282 When a collision cannot be avoided, the student chooses the lesser of the consequences to minimize the amount of impact.

EPISODE 6.3 Pretrip Planning

EPISODE OBJECTIVE - The student can describe appropriate preparation to take and the quickest and most economical routes to follow for given trips.

6.31 The student can list five precautions to take prior to embarking on a long trip of any kind.

6.311 Check gas
6.312 Check oil
6.313 Check tires
6.314 Check windshields, wipers, and other windows
6.315 Check maps

6.32 The student can list general rules for increasing the safety and enjoyment of long trips.

6.321 Begin the trip well rested.
6.322 Take plenty of rest breaks while driving.
6.323 Plan each days destination within easy reach so as to avoid too much strain.
6.324 If you do fall behind schedule, leave a portion of the trip out, if necessary, rather than drive unsafely to catch up.

6.33 The student can list general safety rules for pulling a travel trailer.

6.331 Practice pulling a trailer around your hometown before you start on a long trip.
6.332 Expect the handling of your car to be different with a trailer in tow. All turning must be done gradually. Starting, stopping, and passing all need much more time and space.
6.333 Practice backing your trailer until you become skillful. Remember that the rear of the trailer will move in direction opposite to the direction toward which the back of your car moves.
6.334 Be sure to put a special mirror on your car which is made for tow cars if your trailer blocks your view of the road behind.

6.335 Load your trailer properly to make it easier to handle. Do this by distributing the weight equally on each side putting the heaviest objects over the axles.

6.336 Adjust the equalizing hitch properly, if you have one.

Suggested Learning Activities

1. View several traffic situations on a magnetic board. Describe driving strategies and tactics for avoiding hazardous situations.
2. List four principles for making decisions and apply each principle to given traffic situations.
3. List the driving tactics you should use to prevent another car from tailgating your automobile.
4. Define "buffer zone" or "space cushion" in your own words. List the advantages of following the general strategy of always having a space cushion around your car.
5. List and discuss the IPDE Concept.
6. List the five steps included in the "Smith System" and discuss these steps as they relate to safe driving.
7. While in the driver education car, practice driving through intersections following safe driving practices.
8. Practice entering, driving on, and leaving the expressway following safe driving practices.
9. View a film strip showing the proper procedures for passing and being passed.
10. In a low hazard area, practice the proper procedures for off road recovery.
11. In a driving simulator, practice the proper procedure for recovering from a skid.
12. Using a blow-out simulator and an off-road area, practice the correct procedure for handling front and rear wheel blow-outs.
13. List the proper procedures for safely handling the following problems caused by vehicle failure: accelerator pedal jams, brake failure occurs, power steering fails, lights cease to function, and engine stalls.
14. View a simulation film on driving safely in bad weather.
15. List safety rules to follow for pulling a travel trailer.
16. Write a short paper on the importance of pretrip planning.

MODEL CURRICULUM FOR COMMERCIAL DRIVING SCHOOLS

PART IV

Highway User Responsibilities

UNIT 7.0 Driver Condition and Behavior

UNIT OBJECTIVE - The student can determine a set of strategies for preventing certain psychophysiological factors or social forces from having an adverse effect on his driving proficiency.

EPISODE 7.1 General Physical Conditions Which Can Affect Driving Ability

EPISODE OBJECTIVE - The student can define the general physical conditions of the driver and explain the effects each may have on driving proficiency.

7.11 The student can define fatigue and discuss the effects of fatigue and the methods of controlling it.

7.111 Fatigue is a weariness or exhaustion of a person, mentally and/or physically.

7.112 Fatigue can be caused by such things as lack of sleep, driving too long at a stretch, and emotional strain.

7.113 Fatigue has various effects upon driving performance.

1. Fatigue reduces a driver's alertness.
2. Fatigue slows driver reaction time.
3. Fatigue impairs his judgment of speed.
4. Fatigue impairs his judgment of distance.
5. Fatigue impairs his judgment of depth.

7.114 There are various rules a driver can follow to avoid fatigue.

1. Limit the hours of continuous driving.
2. Keep the car well ventilated.
3. Make sure the seat belt and shoulder harness are fastened. This practice will help you remain alert, yet comfortable.
4. From time to time, alter your position in the seat and the way you grip the wheel.
5. Practice good visual habits such as getting the big picture, aiming high in steering, and keeping your eyes moving.

7.12 The student can discuss various physical impairments, both temporary or permanent, which can affect driving capability.

7.121 Minor illnesses, such as headaches, colds and hay fever may be hazardous to driving. Hearing, visual acuity, reaction time, and overall alertness can be seriously affected. The best compensation to take when suffering from a minor illness is to refrain from driving; however, if it is essential that you drive, then drive more slowly than usual and exercise greater caution. If you suddenly feel dizzy or nauseated, pull over and stop until you feel better.

7.122 Physically impaired people (includes amputees, paraplegics, quadraplegics, postpolio, and other bodily defects) can often, with special equipment in the automobile, drive safely. Keys to driving safely for the physically handicapped driver rely on his having adequate visual acuity, reaction time and frustration tolerance within normal limits, sitting balance, and two usable extremities possessing muscle strength and control for operating steering wheel and controlling gas and brake.

7.123 Persons with permanent diseases such as diabeties, epilepsy, cardiovascular disease, and neuromuscular diseases will be required to see a physician before taking a driver's license exam. Persons having these permanent diseases under control can become safe drivers.

7.124 Many varieties of mental illness can be brought under control; however, in no instance should a person suffering from mental illness be allowed to drive without the approval of a qualified medical authority.

7.13 The student can explain why the factor of aging drivers is becoming a more important problem in today's traffic.

7.131 There are a large number of aging drivers in today's society.

7.132 Many of them suffer from various physical impairments such as poor eyesight and hearing, slow reactions, and temporary lapses of attention. Many also have low glare resistance, and their eyes are slow in recovering from the effects of glare. To compensate for their disabilities, they should reduce speed and be more cautious. Care should be taken not to become overly cautious and create a hazard in fast moving traffic.

7.14 The student can discuss carbon monoxide; its source, effects, and methods of lessening the chances of carbon monoxide poisoning.

7.141 Carbon monoxide is a colorless, odorless, tasteless, and poison gas given off by the exhaust of a vehicle's engine. It is sent from the engine's exhaust into the vehicle and the driver is gradually overcome by the fumes.

7.142 Small quantities of carbon monoxide can dull the driver's reaction time and distort his judgment. Larger quantities can produce fatigue causing the driver to fall asleep behind the wheel. Still larger quantities can, in themself, cause death.

7.143 There are various precautionary measures which can be taken to minimize the chance of carbon monoxide poisoning.

1. Make sure that the car is well ventilated, always leaving one or more windows at least partially open.
2. Have the car's exhaust system checked periodically and defective parts replaced.
3. Never start or run the engine in a closed garage.
4. Do not sit in a car with the engine running and the windows rolled up.
5. Do not allow children to sleep on the floor of the car.
6. At the first sign of drowsiness, stop the car, get out and walk around, and take in some fresh air.

EPISODE 7.2 Emotions and Their Effects on Driving Proficiency

EPISODE OBJECTIVE - The student can describe the nature of emotions and their effects on driving proficiency and then formulate guidelines for responsible driving performance.

7.21 The students can define emotions as they relate to driving as intense feelings which may (and usually do) affect driving adversely.

7.22 The student can list various common emotions which impair driving ability.

7.221 Anger
7.222 Frustration
7.223 Anxiety

7.224 Worry
7.225 Impatience
7.226 Fear
7.227 Excitement

7.23 The student can list various ways in which emotions can affect driving ability.

7.231 Emotions can cause the driver to have problems seeing and identifying potential hazards well in advance.
7.232 Emotions can cause the driver to fail to analyze a situation in order to predict correctly.
7.233 Emotions can cause the driver to make driving decisions based on a badly distorted picture of the situation, or his picture may be dangerously incomplete because the emotional response has diverted the driver's attention.
7.234 Emotions can cause the driver to overact with the controls of his automobile. He may accelerate too hard, drive too fast, swerve too sharply, or use his brakes too hard and fast.

7.24 The student can list general guidelines for controlling emotional responses which impair driving performance.

7.241 Take full responsibility for your own driving. Look out for other people's safety as well as your own. Accept the blame for your mistakes rather than blame others.
7.242 Drive defensively, never depending on the alertness and skill of other drivers. Be prepared in advance to defend yourself and other people from unexpected moves by other drivers.
7.243 Use sound judgment obtained from practicing good driving habits and defensive driving.
7.244 Be courteous and considerate of other drivers. Be thoughtful of pedestrians and your own passengers.
7.245 Concentrate on your driving. Make decisions based on the reality of the driving situation.
7.246 Separate emotions from your driving. Develop the habit of keeping emotions under control.
7.247 Develop steady, smooth, and uneventful driving so as to avoid disturbing events.
7.248 Neither brag about your driving nor use it to show off.

EPISODE 7.3 The Role of Attitudes in Driving Safely

EPISODE OBJECTIVE - The student can identify characteristics of good and bad attitudes as they relate to driving and discuss methods for improvement of attitudes.

7.31 The student can list characteristics of good driving attitudes.

- 7.311 A driver with a good driving attitude maintains his car in top condition.
- 7.312 A driver with a good driving attitude handles his car with respect.
- 7.313 He does his driving only when he is in good physical and mental condition.
- 7.314 He controls himself in spite of pressures from all sides.
- 7.315 He shows respect for other users of the highway transportation system.

7.32 The student can list characteristics of bad driving attitudes.

- 7.321 The driver possessing a bad driving attitude is easily influenced by his emotions.
- 7.322 The driver possessing a bad attitude often breaks the law if he thinks he can get away with it.
- 7.323 He often takes unnecessary risks for the thrill of taking the risk or showing off.
- 7.324 He is discourteous to other users of the HTS, often blaming them for his own mistakes.
- 7.325 He very often feels that he is a more skilled driver than others and thus should be allowed to drive by his own rules.

7.33 The student can list and discuss steps for improving driver attitude.

- 7.331 A rigorously honest self-appraisal is a necessary first step in changing a driving attitude from bad to good.
- 7.332 Determine your weak points and strive to improve upon these weak points. In doing this, you will also discover your strong points of driving.
- 7.333 Do not expect overnight miracles, but realize that if you keep striving to improve, with experience you will improve.

Suggested Learning Activities

1. Read Chapter 18, pages 286-297, of Let's Drive Right, Fifth Edition.
2. Develop a list of personal guidelines for minimizing the danger of fatigue while driving. Include the measures that delay the onset of fatigue and those that can compensate for the effects of fatigue already present.
3. Given a list of physiological conditions that could adversely affect driving ability, classify them as permanent or temporary. For each of these list the driving ability affected and how one could compensate for the handicap.
4. Discuss the pros and cons for granting a driver's license to persons with diabetes, epilepsy, and cardiovascular diseases.
5. List some of the changes which you can expect to occur in your driving ability as you grow older.
6. While in the driver education car, demonstrate precautionary measures for minimizing the chance of carbon monoxide poisoning.
7. While observing in the driver education car, compile a list of traffic situations in which emotion may have been a factor in the behavior of one or more drivers. For each situation describe methods for minimizing the frustration of the drivers.
8. While observing in the driver education car, identify some of the risks that you observe other drivers take. In each case describe what the driver could expect to gain or lose.
9. Assess your own attitude toward driving by taking the attitude test on page 44 of Driver Education: Learning to Drive Defensively.

UNIT 8.0 Alcohol and Other Drugs

UNIT OBJECTIVE - The student can demonstrate a knowledge of the concepts and generalizations which will enable him to make wise decisions in regard to the use of alcoholic beverages or other drugs anytime he will be using the HTS as a driver, passenger, or pedestrian.

EPISODE 8.1 Nature and Scope of the Drinking-Driving Problem

EPISODE OBJECTIVE - The student acquires accurate information about the drinking-driving problem and identifies the use of alcohol as a major contributing factor of highway accidents; he compares the physical and mental effects of low and high blood circulation with traffic accident experience.

8.11 The student can define various types of drinkers.

8.111 A light drinker is a person who usually drinks one or two drinks per sitting.

8.112 A medium drinker is a person who usually drinks three or four drinks per sitting.

8.113 A heavy drinker is a person who usually drinks five or more drinks per sitting.

8.114 A problem drinker is a person whose frequent extensive drinking effects psychological or physical dependence on alcohol and who as a result is having problems in his health, social, and economic functions. This group includes both alcoholic and pre-alcoholics.

8.115 A social drinker is a person who is not dependent on alcohol and who rarely or never has problems in health, social, or economic functioning attributable to alcohol. Most, but not all, social drinkers are light or medium drinkers.

8.12 The student can discuss various statistics relating to consumption of alcohol by our population today.

8.121 Approximately 95 million adults drink alcoholic beverages. This figure represents about 78% of the adult population.

8.122 Of persons between the ages of 15 and 30 years, about 86% consume alcohol.

8.123 The peak of alcohol consumption occurs between the ages of 25 and 40 years for most people.

8.124 Of males and females, about the same number of each participate in drinking; however, males per person consume more alcohol than females.

8.13 The student can discuss various statistics relating to drinking and automobile accidents.

8.131 Most studies indicate that alcohol is a factor in no less than 33% of all traffic fatalities.

8.132 The National Safety Council reports that in some states the frequency of alcohol related to traffic accidents was as high as 86%.

8.133 Studies indicate that alcohol was a factor in 67% of single car accidents.

EPISODE 8.2 Effect of Alcohol on the Body as Related to the Driving Task

EPISODE OBJECTIVE - The student can describe the effects of alcohol on the human functioning involved in driving.

8.21 The student can list the approximate alcohol content of various drinks.

8.211 A 12 ounce beer contains about 4% alcohol.

8.212 A 12 ounce malt beverage contains 7% alcohol.

8.213 A 3 ounce glass of fortified wine contains 18% alcohol.

8.214 A 3 ounce glass of natural wine contains 12% alcohol.

8.215 A 2 ounce glass of a medium liqueur (fruit brandy) contains 25% alcohol.

8.216 A 1 ounce glass of distilled spirits contains 45% alcohol.

8.217 A 4 ounce glass of a medium mixed drink contains 15% alcohol.

8.22 The student can discuss the basic process of absorption, distribution, and elimination of alcohol in the human body.

8.221 Alcohol is one of the few substances which are absorbed directly from the stomach and intestines into the circulatory system.

8.222 Alcohol is distributed throughout the body by the circulatory system.

8.223 About 90% of the alcohol ingested is eliminated through the process of oxidation in the liver at the rate (for all people) of about one drink per hour.

8.23 The student can discuss various factors which influence absorption and elimination of alcohol from the body.

8.231 Various factors influence absorption.

1. The drinker's body weight
2. The contents of the drinker's stomach
3. The physical condition of the drinker
4. The speed at which drinking is done
5. The other substances (soda, etc.) that comprise the drink.

8.232 Because the liver eliminates almost all of the alcohol in the body, very little can be done to alter the rate of alcohol elimination. The liver works at a rate that changes very little.

8.24 The student can list the various effects of alcohol on driving ability as one continues to injest the alcohol.

8.241 Judgment and reasoning are the first and most important processes to be impaired in terms of the driving task.
8.242 Vision becomes impaired.
8.243 Hearing becomes impaired.
8.244 Muscle coordination decreases.
8.245 Attention span decreases.
8.246 Reaction time is slowed.

8.25 The student can list the behavioral characteristics most commonly associated with the drinking driver.

8.251 Driving too fast for conditions.
8.252 Driving in spurts; slow, then fast, then slow again.
8.253 Frequent lane changing.
8.254 Improper passing with insufficient clearance.
8.255 Overshooting or disregarding traffic control signals.
8.256 Approaching signals unreasonably fast or slow and stopping or attempting to stop with uneven motion.
8.257 Driving at night without lights or delay in turning lights on when starting from a parked position.
8.258 Failure to dim lights to oncoming traffic.
8.259 Driving unreasonably slow.
8.2510 Driving too close to shoulders or curbs, or appearing to hug the edge of the road, or continually straddling the center line.

8.26 The student can compare various blood alcohol levels (BAL) to the progressive stages of intoxication.

8.261 Stage I, up to .05% BAL - Slight changes occur in feeling. Mental relaxation occurs along with slight impairments of judgment and coordination.

8.262 Stage II, .05% to .09% BAL - A greater loss of judgment and fine skills occur. The person shows exaggerated emotion and behavior.

8.263 Stage III, .10% to .14% BAL - Judgment and coordination are seriously impaired. Clumsiness, unsteadiness, and boisterous behavior become quite common.

8.264 Stage IV, .15% and over - Complete and total intoxication occurs. Bodily functions and mental abilities become very abnormal. At higher levels, coma and death may result.

8.27 The student can list some general rules to follow to insure against driving while under the influence of alcohol.

8.271 Limit the number of drinks you have so as not to allow your BAL to get too high.

8.272 Space your drinks apart in such a manner as to keep your BAL down.

8.273 Eat before and/or during the drinking so that the contents of your stomach are not just alcohol.

8.274 Know that the more you drink, the greater are your chances of having an accident if you follow that drinking by driving.

8.275 If you do drink too much, do not drive.

EPISODE 8.3 Concepts, Definitions, and Classifications of Drugs and Their Effects on Driving

EPISODE OBJECTIVE - The student can identify and classify the various drug types and their effects on the human functions involved in driving and predict the consequences of these effects on driving capability.

8.31 The student can define, discuss, and classify the various drug types and list some common drugs which belong to these various types.

8.311 Narcotics are opiate derivatives. They are depressant drugs which are used medically as pain

killers, cough depressants, and for diarrhea prevention. They are sued illegally for their euphoric effect. Some of the more common narcotics are heroin, morphine, and codeine. Continued use of narcotic drugs generally leads to physical and psychological dependence upon them.

8.312 Amphetamines are central nervous system stimulants. They have numerous medical uses (requiring presription) and are often used illegally by people who wish to stay awake and alert. Benzedrine, Dexedrine, and Methedrine are three common amphetamine drugs. Continued use of these drugs may lead to psychological dependence.

8.313 Barbiturates are central nervous system depressants and sedatives. They also have numerous medical uses. They are used illegally for their euphoric effect. Phenobarbital and penothal are two of the more common barbiturates. Continued use of these drugs is likely to cause the user to become both physically and psychologically dependent upon them.

8.314 Hallucinogens are mind altering drugs. They are used medically only for research purposes and illegally for their euphoric and hallucinogenic effects. Marijuana, LSD, and mescaline are three of the more common hallucinogens. Continued use can lead to psychological dependence.

8.315 Tranquilizers are central nervous system depressants. They are used medically to treat anxiety, high blood pressure, emotional problems, and alcoholism. They are often abused by people who seek their relaxing effect. Librium and Valium are two common tranquilizers.

8.316 Nonprescription drugs are drugs that can be purchased without a prescription. They vary greatly in strength and effect. Many of these drugs are widely advertised and consist of sprays, syrups, lozenges, aspirins, and antihistamines.

8.32 The student can predict the possible consequences that the effects of the various drug types have on driving ability.

8.321 Narcotics can distort one's judgment and impair his motor skills, thus making driving dangerous.

8.322 Amphetamine use can be particularly hazardous to driving because they prevent the user from realizing how tired he may be.

8.323 Barbiturate use can impair the user's judgment and coordination in much the same way alcohol does, thus making driving quite hazardous.

8.324 Hallucinogens distort one's time and space judgments in such a manner that driving becomes difficult.

8.325 Tranquilizers can slow reaction time and cause drowsiness, thus making driving somewhat hazardous.

8.326 Nonprescription drugs should not be used when driving, unless you are sure that they will not affect your mental and physical performance. If you are in doubt, ask your doctor.

EPISODE 8.4 Legislation, Enforcement, and Controls for the Drinking-Driving and Drug Abuse Problems

EPISODE OBJECTIVE - The student can define and explain the laws and enforcement measures designed to control the drug-drinking-driving problems and evaluate these measures.

8.41 The student can define various terms relating to the drug-drinking problem.

8.411 Intoxication is literally the state of being poisoned or drugged through the excessive use of a toxic drug, alcohol, barbiturates, etc.

8.412 "Drunken driving" refers to operating a vehicle while intoxicated by alcohol.

8.413 "DWI" is driving while intoxicated.

8.414 Drug addiction is a condition resulting from repeated use of a drug in which physical dependence is established because of biochemical and physiological adaptations to the drug.

8.415 Drug use refers simply to the use of a drug.

8.416 Drug abuse is the wrong or improper use of a drug.

8.417 "Implied Consent" means that a person who exercises his privilege to drive a motor vehicle automatically consents to take a breath test if he is arrested for DWI.

8.42 The student can state the basic principles and penalties of the Illinois Implied Consent Law.

8.421 A driver who is arrested for DWI is required to take a breath test.

8.422 The breath test device, operated by a qualified person, accurately measures and registers the percentage of alcohol in the blood of the driver being tested.

8.423 To insure accuracy, each individual is given two tests. The test results are considered physical evidence to help convict the guilty or free the not guilty.

8.424 The person arrested and charged with DWI has various rights.

1. The results of breath tests may be used as evidence in court to support the DWI charge.
2. A reading of one tenth of one percent blood alcohol content indicates he is presumed to be under the influence of intoxicating liquors, and driving illegally.
3. He may refuse to take the breath test, but if he does his license may be suspended.
4. He may consult with an attorney or any other person by phone before he makes his decision to take the test.
5. He will receive a copy of the test results.
6. He may obtain an additional chemical test, administered by an available, qualified person, at his own expense.
7. Full information on the tests requested by the police will be made available to his attorney.

8.425 The court, upon first conviction, may fine a person not less than $100 and not more than $1000. The penalty can also include imprisonment for not less than two days or more than one year. Of course, the convicted person's driver's license will be revoked.

8.426 The arrest and conviction of an individual for DWI can prove helpful in reforming him. It has been established that drinking drivers are one of the greatest hazards to traffic safety. If, during the proceedings of the court on the DWI charge, it is established that a driver has a known drinking problem, the court may, under the Implied Consent law, require that driver to obtain professional help for his problem.

Suggested Learning Activities

1. View a transparency defining the various types of drinkers.
2. View a transparency listing the approximate alcohol content of various drinks.
3. Practice using a Drink-Drive Calculator to determine the approximate BAL for persons drinking over varying periods of time.
4. Define the conditions under which a driver would be arrested and convicted of DWI.
5. Write a short paper justifying the need for implied consent.
6. Write a short paper discussing the behavioral changes which one might expect to occur as one's BAL increases.
7. Construct a chart classifying the major types of drugs. Under each class, list the general effects of drugs in the class as these effects pertain to driving. Also, list examples of some of the common drugs in each class.
8. Read an authoritative magazine or newspaper article about drugs. Write a short paper on the article discussing the relationship of these drugs to safe driving.
9. Arrange to interview an official of your local police department on the problem of drinking drivers. Be prepared to report on the interview.

UNIT 9.0 Obedience to and Enforcement of Traffic Laws

UNIT OBJECTIVE - The student is able to determine a person's shared legal and moral responsibilities when using the HTS; he recognizes the need for a system of just traffic law enforcement.

EPISODE 9.1 The Nature and Scope of Traffic Laws

EPISODE OBJECTIVE - The student can define the different kinds of laws, describe their purposes and identify them with traffic and highway system control.

9.11 The student can state the purpose and scope of traffic laws.

9.111 The purpose of traffic laws is to provide for the orderly movement of traffic and pedestrians, and to prevent accidents.

9.112 Traffic laws apply to everyone, including pedestrians, people riding bicycles and people driving animal drawn vehicles.

9.12 The student can define law and classify various types of traffic laws.

9.121 Laws are rules which society adopts to govern itself. Since laws are man-made, they reflect the way man wants to be governed.

9.122 The Illinois Driver Licensing Law governs who will be issued a license, at what age, under what conditions, when they will be suspended or revoked, etc.

9.123 Illinois Responsibility Law tells the type and amount of insurance required by law, establishes methods of proving financial responsibility, etc.

9.124 Illinois Highway Safety Law is to review and coordinate the highway safety program of the state.

9.125 Rules of the Road establishes standards for traffic signs, signals, markings, speed restrictions, safety zones, etc.

9.126 Certificate of Title and Registration of Vehicle Laws protect the citizen from buying stolen cars, helps to recover stolen equipment, and helps police to locate you in an emergency.

9.127 Vehicle Equipment and Inspection Laws keep drivers from operating a vehicle on a public street which is in unsafe condition.

EPISODE 9.2 Enforcement of Traffic Laws

EPISODE OBJECTIVE - The student can describe the nature and purposes of law enforcement, define the key terms, and summarize the social control that traffic laws and enforcement represent.

9.21 The student can state that the main purpose of enforcement is to secure voluntary compliance with laws and regulations.

9.211 Enforcement is not a means of gaining revenue.
9.212 Enforcement is not a lever by which police can manipulate the public.
9.213 Enforcement is not meant to be used against certain segments of the public and not others.

9.22 The student can list two methods of traffic law enforcement.

9.221 One method of traffic law enforcement, the best method, is self-enforcement. This method involves voluntary obedience to traffic laws at all times without police or court supervision.
9.222 The other method is forced obedience of traffic laws. This method involves police and the courts and relies upon punitive measures.

9.23 The student can state the basic functions of the traffic court judge.

9.231 The traffic court judge educates the traffic law offender.
9.232 The traffic court judge can educate others who are present in court.
9.233 He disciplines the traffic law offender.
9.234 The judge may send the offender to a traffic school for further education.

9.24 The student can distinguish between the duties of the prosecutor and the defense attorney.

9.241 The prosecutor has the burden of proving the State's case against an alleged traffic offender "beyond a reasonable doubt."
9.242 The defense attorney has the duty to present a case that will lead to acquittal for the alleged offender. He must uncover facts that will sway the judge or jury. He must protect and advise his client.

9.25 The student can list four qualities upon which good traffic law enforcement depends.

9.251 The individual must recognize his responsibility to evaluate and support good law enforcement in his community.

9.252 If traffic laws are to be effective the individual must understand the law; respect the law; and believe that he will be punished for offenses against the law.

9.253 The individual must accept and adopt certain disciplines and practices which he performs on his own.

9.254 The responsible driver obeys all traffic laws and, if he disagrees with a law, he works through the proper channels to get the law revised.

EPISODE 9.3 Interpretation of Traffic Laws Regulating HTS User Behavior or Condition

EPISODE OBJECTIVE - The student can define the key concepts that establish the specifications for conventional behavior, define the key terms that indicate irresponsible behavior, and demonstrate his capability to interpret traffic laws by applying the "reasonable" and "responsible" principles to the various traffic situations with which he is confronted.

9.31 The student can distinguish between the concepts of "rights" versus "privileges."

9.311 A right is something which is guaranteed to the individual by law.

9.312 A privilege is a special right, advantage, or favor guaranteed to an individual or group.

9.313 The operation of a motor vehicle is a conditional privilege which can be suspended by police or court action.

9.32 The student can list the requirements for earning a legal operating license in Illinois.

9.321 Be a legal resident of Illinois.
9.322 Have a valid residence address.
9.323 Surrender all valid foreign and state licenses.
9.324 Have proper personal identification.
9.325 Have a social security number.
9.326 Be 18 years of age, or be 16 years of age and have completed a driver education course.
9.327 Have written consent of a guardian if you are under 21 years of age.
9.328 Successfully pass the driver license exam consisting of a vision-physical condition test; a highway signs and signals test; a traffic law test; and a driving test.
9.329 Pay a fee of $8.00.

9.33 The student can list the requirements for maintaining a legal operators license.

9.331 Apply for renewal every three years.
9.332 Maintain a satisfactory driving record.
9.333 Pass the physical condition re-examination.
9.334 Pass the driving ability re-examination.

9.34 The student can list reasons why responsible drivers comply with the law.

9.341 Responsible drivers understand the law and its requirements.
9.342 They wish to set forth a good example.
9.343 They respect the law and what it stands for.
9.345 They do not wish to pay the penalty for disobeying the law.

9.35 The student can list basic qualities of a reasonable, prudent, and responsible driver.

9.351 They exercise caution.
9.352 They are alert and drive defensively.
9.353 They practice cooperation.
9.354 They drive intelligently.
9.355 They are courteous.
9.356 They practice good sportsmanship.

9.36 The student can list basic qualities of an irresponsible driver.

9.361 They are competitive.
9.362 They often show-off.
9.363 They often daydream.

9.37 The student can list various types of traffic violations which will cause you to lose your license in addition to other severe penalties.

9.371 Killing someone as a result of a reckless act in which the operation of a motor vehicle is invovled (involuntary manslaughter or reckless homicide).
9.372 Driving or being in actual physical control of a vehicle while under the influence of drugs or intoxicating liquor.
9.373 Committing certain types of crimes (felonies) under the laws of any state or the federal government in which a motor vehicle was involved.
9.374 Leaving the scene of a collision in which you are involved as a driver, if a collision results in death or personal injury.
9.375 Committing three charges of reckless driving in twelve months.
9.376 Committing reckless conduct arising from use of a motor vehicle causing bodily harm or danger to another person.
9.377 Drag racing.
9.378 Violating the Financial Responsibility Law relating to the operation of motor vehicles used for the transportation of persons for hire.

EPISODE 9.4 Enactment and Administration of Effective Legislation and Enforcement

EPISODE OBJECTIVE - The student can describe and classify the process of legislation and administration concerned with traffic law enforcement, just and uniform laws, and traffic accidents; he can summarize the problems relating to legislation, obedience, and enforcment of traffic laws.

9.41 The student can state and discuss the basic purpose of legislation.

9.411 The purpose of legislation is to provide modern, consistent laws governing vehicles and traffic.

9.412 Only through the enactment of such laws can the driver know and understand his responsibilities.

9.413 These laws provide the base upon which the police, the motor vehicle administration, and the courts are able to operate effectively.

9.42 The student can list the basic steps necessary for a bill to become a law.

9.421 The bill must be introduced in either the House or Senate, depending upon who introduces the bill.

9.422 The bill then is referred to the proper committee for action.

9.423 If the committee approves the bill, it will be put to the floor for a vote. If the bill is passed, it will be sent to the other legislative body for the same process.

9.424 If the second legislative body passes the bill it is sent to the President for his approval. If the second body passes the bill but changes it, the bill goes instead to the Conference Committee for Compromise Bill.

9.425 The President can either sign the bill, veto it, or send it back with recommendations.

9.426 If the Congress still wants the bill to be passed, then 2/3 of both bodies must vote to pass the bill.

9.43 The student can discuss the basic role and responsibilities of the motor vehicle administration.

9.431 Most states have a motor vehicle administration to exercise control over drivers and automobiles.

9.432 It's role is to administer vehicle and traffic laws.

9.433 Responsibilities include licensing drivers, maintaining records, vehicle registration, compiling accident statistics, operating financial responsibility laws, accident research, driver improvement, and vehicle safety inspection.

9.44 The student can identify some of the various problems of effective legislation and enforcement of traffic laws.

9.441 Effective legislation and enforcement require good public education. Many drivers violate the law out of ignorance while others disregard traffic laws because they do not consider them important.

9.442 Catching the traffic law violator requires organized effort and much time and expense by police departments.

9.443 Traffic courts are overcrowded and many cases are quite complex, thus causing some problems to effective enforcement.

9.444 The legislative process is also complex and time consuming.

Suggested Learning Activities

1. Read Unit 1, pages 1 through 12 of Tomorrow's Drivers.
2. Construct a chart classifying various laws pertaining to traffic safety.
3. View a transparency on the basic purposes of enforcement.
4. Write a short paper discussing the two methods of law enforcement.
5. Report on the basic duties of a traffic court judge, a prosecutor, and a defense attorney.
6. View a transparency explaining the difference between rights and privileges.
7. Read the Illinois Rules of the Road, pages 3 through 8, and 58.
8. List the basic qualities of a responsible and an irresponsible driver.
9. From an analysis of newspaper accounts of traffic accidents and court cases, draw conclusions and summarize common problems relating to legislation, obedience, and enforcement.
10. For given driving situations, identify applicable laws and distinguish between facts and assumptions given; justify certain enforcement actions that should be taken.
11. Trace the steps necessary for a bill to pass the legislature.
12. View a transparency listing the basic responsibilities of the motor vehicle administration.

UNIT 10.0 Post Crash Procedures and Responsibilities

UNIT OBJECTIVE - The student can describe and define the legal and moral responsibilities of persons involved in or driving into a traffic accident situation.

EPISODE 10.1 Legal and Moral Duties of a Reasonable and Prudent Person

EPISODE OBJECTIVE - The student can describe and define the legal duties and responsibilities of persons involved in traffic accidents and compare the actions of the involved person with the standard of a reasonable and prudent person.

10.11 The student can define various terms relating to an accident.

10.111 A "traffic accident" is an unplanned event involving one or more motor vehicles that frequently leads to personal injury, property damage, or death, and is usually preceeded by an unsafe act or acts and/or an unsafe condition or conditions.

10.112 A "reportable accident" is any accident that results in death or bodily injury, or damage to the property of any one person in excess of $100.

10.12 The student can list the legal and moral procedures to follow when he is involved in a traffic accident.

10.121 Stop immediately in a safe place.

10.122 Assist the injured if aid is necessary or requested. Protect the victim from traffic. In case of serious injury get a doctor or call an ambulance--whichever will arrive sooner. Try to make the victim comfortable, but don't move him unless absolutely necessary. Don't attempt first aid unless you know something about it.

10.123 Warn traffic. This will help prevent another accident. Stationing someone at a safe spot to warn approaching drivers is a good idea. Use flares when they are available.

10.124 Stay at the scene of the accident until you have exchanged names, addresses, and license numbers with the other parties involved.

10.125 Notify the nearest police station as quickly as possible.

10.126 Report the accident to the Illinois Department of Transportation.

10.13 The student can list the legal and moral procedures to follow when he is a witness to a traffic accident.

10.131 Give assistance to the injured if assistance is necessary or requested.

10.132 Give aid in any other ways necessary such as warning other traffic or calling for the police or for medical assistance.

10.133 Give to the police, and those involved in the accident, if necessary, as accurate account as possible of what you saw.

10.14 The student can state the legal procedures for reporting a "reportable accident."

10.141 If no police officer is present, notify the nearest police station as quickly as possible. If the accident occurs outside of a municipality, notice must be given to the nearest office of the county sheriff or Illinois State Police. Whenever the driver is unable to give immediate notice of an accident and there are passengers in the vehicle, one of them who is capable of doing so must comply with the requirement.

10.142 As soon as possible, but not later than ten days after the accident, a written report must be made to the Illinois Department of Transportation. Report forms can usually be obtained from a

police officer or automobile insurance agencies. Accident reports are kept confidential.

10.143 Many cities also require accident reports. Be sure to inquire if you are involved in an accident within the limits of a municipality.

10.15 The student can list the correct procedure to follow if he damages an unattended vehicle or other property.

10.151 Stop immediately without obstructing traffic.

10.152 Seek the owner or driver and inform him of your name, address, and license plate number.

10.153 If you are unable to locate the owner or driver you must furnish the information in a written notice attached securely in a conspicuous place on the vehicle or property which has been damaged. Then you must, without unnecessary delay, notify the nearest police station and make such accident reports as may be required.

10.16 The student can state the penalty for leaving the scene of an accident.

10.161 A driver who fails to stop at the scene of an accident in which his vehicle was involved and in which someone was killed or injured may, upon conviction, be sentenced to not less than 30 days nor more than one year in jail. In addition to the jail sentence the driver may be fined up to $1000. Illinois law also requires the Secretary of State to revoke the driver license of any person convicted of leaving the scene of an accident involving death or personal injury.

10.17 The student can state the basic principles of the Safety Responsibility Law.

10.171 If property damage resulting from a motor vehicle accident is more than $250 to any one person, or if there is fatal or personal injury, the driver must satisfy the requirements of the Safety Responsibility Law. If he does not, his drivers license and license plates will be suspended.

10.172 The Illinois Safety Responsibility Law requires drivers and vehicle owners to put up security, in an amount determined by the Illinois Department of Transportation, to cover damages resulting from an accident unless they are able to show evidence of insurance coverage or one of the other acceptable ways of satisfying the requirements of the law. Coverage is required in the following amounts:

1. $10,000 for death or bodily injury to any one person.
2. $20,000 for death or bodily injury to two or more persons.
3. $5,000 for property damage to others.

10.18 The student can define the basic premise of the Financial Responsibility Law.

10.181 Any person whose drivers license has been revoked must establish proof of financial responsibility for the future before a new license can be issued to him. This may be done by depositing security acceptable to the Secretary of State, or by filing evidence of insurance coverage.

EPISODE 10.2 Insurance Protection Against the Economic Consequences of Traffic Accidents

EPISODE OBJECTIVE - The student can describe the nature and kinds of insurance, define key terms, coverage, and problems of insurance, and apply the principles of insurance to given situations.

10.21 The student can describe the various coverages of automobile insurance.

10.211 Bodily Injury Liability Insurance - This coverage applies when your car injures or kills pedestrians, persons riding in other cars, or guests in your car. It is in force as long as your car is driven by you, members of your immediate family or others who drive it with your permission. You and all members of your family are covered even while driving someone else's car if you have the owner's permission. When claims or suits are brought against you, Bodily Injury Liability Insurance provides protection in the form of legal defense, and if it is agreed by the parties involved--or judged by a court--that you are legally liable for the injury, your insurance company will pay the damages assessed against you up to the limits stated in your policy.

10.212 Property Damage Liability Insurance - This coverage applies when your car damages the property of others. More often than not the property damaged is another car; but you are also covered for damages to other properties such as lamp posts, telephone poles, and buildings. It does not cover damage to your car. Protection under property damage liability insurance is in force as long as your car is driven by you, members of your immediate family, or others who drive it with your permission. You and all members of your family are covered even while driving someone else's car if you have the owner's permission. When claims and suits are brought against you, property damage liability insurance provides protection in the form of legal defense and indemnification through the payment of damages for which you are legally liable. Of course, your insurance company does not pay damages beyond the limits stated in your policy.

10.213 Medical Payments Insurance - This coverage pertains to medical expenses resulting from injuries suffered by you and all members of your immediate family while riding in your car or someone else's car, or when struck by a car while walking. It also applies to guests

occupying your car. The insuring company agrees to pay all reasonable medical expenses incurred within one year from the date of the accident, including those for necessary medical, surgical, x-ray and dental services, prosthetic devices, ambulance, hospital care, professional nursing and funeral services. Medical payments differ from bodily injury liability coverage in that it applies to members of your family, not just to others; and payment is made without concern for legal liability--it doesn't matter who is at fault. The maximum amount the insurance company will pay to any one person injured in any one accident is limited to the amount stated in the policy. If you have a large family or if you frequently transport your neighbors' children, you should consider the higher limits of medical payments coverage and the advantages they offer. With the cost of medicine, a doctor's care and hospital services increasing markedly over the past several years, many car owners are finding that the coverages they chose when they bought their policies are no longer adequate.

10.214 Protection Against Uninsured Motorists - None of the coverages described earlier protects you or other members of your family if injured by a hit-and-run driver or by a motorist who carries no liability insurance. That is what this inexpenseive coverage is for. If it is established that an uninsured motorist is legally liable for your injury and you are unable to collect from him--or if the injury was caused by a hit-and-run driver--your insurance company will pay the damages up to the limits specified in your policy. Protection against uninsured motorists applies to the policyholder and all members of his immediate family whether occupying the family car or someone else's, or walking. It also applies to guests occupying the policyholder's car.

10.215 Comprehensive Physical Damage Insurance - You are protected against financial loss resulting from any one of a large number of perils

when you have comprehensive physical damage insurance on your car. These perils include: fire, theft, glass breakage, flood, falling objects, missiles, explosion, earthquake, windstorm, hail, water, vandalism or malicious mischief, riot or civil commotion, or collision with a bird or animal. Comprehensive physical damage insurance, which applies to your car only, does not apply when your car is damaged in a collision with another car or object, or when damaged due to upset. Nor does it include wear and tear, radiator leakage, engine failure, or other mechanical difficulties. In most areas, the price you pay for comprehensive physical damage insurance is less than the cost of bodily injury and property damage liability coverages. It varies from area to area with the degree to which your car is exposed to perils insured against under this coverage. Car thefts run high in some areas, low in others. Windstorms and hail do considerably more damage in certain states than in others.

10.215 Collision Insurance - If you car is damaged as a result of colliding with a vehicle or other object, or as a result of turning over, your collision insurance will cover the damage to your car regardless of who was responsible. This coverage does not apply to personal injuries suffered in automobile accidents,nor to damage your car does to the property of others. Collision insurance is usually written on a $50 or $100 deductible basis. This means that you pay the first $50 or $100 of damage and the company pays the rest. As the deductible amount increases the premium decreases. The year, make, and model of your car are major factors in determining what you pay for collision insurance. Premiums are highest when a car is new, and decrease as it gets older. There comes a time however, in the life of a car when its value continues to decrease but the cost of collision insurance does not. When your car has reached that age you should weigh the cost of insuring it against its value.

10.22 The student can define no-fault insurance.

10.221 No-fault insurance does away with the need to decide who is at fault in a crash.

10.222 It is written in such a manner that, in case of injury to a driver or his passengers, his own insurance company pays medical costs and compensation without trying to fix the blame.

10.23 The student can discuss the advantages and disadvantages of no-fault insurance.

10.231 One advantage is the quick settlement of claims.

10.232 Another advantage is that the accident victims can save money if a suit can be avoided.

10.233 Insurance companies can also save money through a reduction of court costs.

10.234 A disadvantage is that there is no compensation for pain and suffering.

10.235 Another disadvantage is that under some provisions, medical payments would not be made at all if the accident victims have enough coverage under another medical insurance plan.

10.24 The student can define Assigned-Risk Plan insurance and discuss the various circumstances under which this plan becomes necessary.

10.241 Assigned-Risk Plan provides bodily-injury and property-damage liability insurance at quite high expense to people who are unable to buy insurance from any other company at standard rates.

10.242 Drivers with bad accident or violation records, or whose license has been suspended or revoked are the types of people needing insurance under this plan.

10.243 Each insurance company shares the "assigned" business in a state in proportion to the amount of business it does there.

10.25 The student can list factors which cause insurance companies to increase their rates.

10.251 Insurance companies increase their premiums for persons driving high powered cars concluding that these cars are more often involved in accidents than regular cars.

10.252 Insurance companies increase their premiums for higher risk people such as people under 25 years of age and people who have a record of violations and accidents.

10.253 Repair costs have risen sharply during recent years costing insurance companies more money for coverage, thus causing them to raise their rates.

10.26 The student can list various types of reduced rate plans offered by some insurance companies.

10.261 Safe-Driver Insurance Plan - This plan reduces rates for persons who drive a specified period of time without a moving violation or accident.

10.262 Second Car in Family - Some insurance companies offer a small percentage reduction on insurance for the second car covered.

10.263 Driver Education - Some companies offer a discount in insurance to young people who complete an approved driver education course.

10.264 Other reduced rates and discounts include such things as farmer discount, non-drinker discount, non-smoker discount, reduced rate for a woman who is the only driver, small car discount, etc.

Suggested Learning Activities

1. Compile a scrapbook of printed descriptions of traffic accidents taken from local newspapers.
2. Read pages 44-47 of the Illinois Rules of the Road concerning procedures to follow if you are involved in an accident.
3. Given the details of a traffic accident and imagining being one of the drivers involved, fill out an accident report form and identify where the reports should be sent.
4. Read pages 344-350 of Let's Drive Right, 5th edition, concerning insuring your car.
5. Conduct a chart explaining the various coverages on an insurance plan.
6. Make a list of things that increase and decrease insurance rates.

UNIT 11.0 Selection, Inspection, and Maintenance of Safe Vehicles

UNIT OBJECTIVE - For the various vehicles used, the student can contrast the performance characteristics and optional equipment available in terms of safety, economy, and convenience; he can evaluate the performance or functioning of the various vehicle subsystems to determine the need for corrective maintenance or repairs.

EPISODE 11.1 Selection of Safety and Economical Equipment

EPISODE OBJECTIVE - The student can describe the equipment components of a safe and proper vehicle, distinguish between legal and illegal equipment, cite the advantages and disadvantages for the various equipment options available, and apply these factors to the selecting and equipping of a safe and proper vehicle.

11.11 The student can list and discuss vehicle equipment required by Illinois law.

11.111 Brakes are required on all wheels. However, motor driven cycles need only one brake, operated by either hand or foot, and vehicles with three or more axles may have a front axle with brakes. Antique vehicles (more than twenty-five years old) must have the same type brakes originally installed, and when on the highway they need brakes on at least two wheels.

All motor vehicles, except those with other requirements as noted above, must have separate brake systems. Each brake system shall work on at least two wheels, and if the systems are connected, the failure of one shall not leave the vehicle without brakes. Wheel brakes must be adequate to stop a vehicle traveling 20 miles per hour within a distance of 30 feet on dry pavement (antique vehicles must be able to stop within 40 feet). The emergency

or parking brake must be able to stop the vehicle within 55 feet under similar circumstances and must be able to hold it stationary on a grade or hill. Brakes must be kept in good working order and properly adjusted.

11.112 All motor vehicles must have a horn which can be heard at least 200 feet away. Horns with unreasonably loud or harsh sounds are prohibited, and no horn may be sounded unless necessary. Sirens, whistles or bells are not allowed except on authorized emergency vehicles.

11.113 All motor vehicles must have a muffler that is in good working order, so that excessive or unusual noise and smoke are prevented. Cutouts and bypasses are illegal, and changing the exhaust system to amplify or increase noise is not allowed. The term "muffler" also includes turbine wheels which are used in the exhaust system of a diesel engine.

11.114 All motor vehicles must have a rear-view mirror which will reflect a view of the highway at least 200 feet to the rear.

11.115 Windshields and all windows must be free of any signs, posters, snow, ice, frost or other non-transparent material which interferes with the driver's view of the highway. No object may be placed or suspended on any part of the inside of a motor vehicle. The only exceptions are religious or lodge statues 6 inches or less in height, or wearing apparel that is suspended behind the driver and is not obstructing his view. All glass must be of an approved safety type. No motor vehicle may be driven when the windshield or rear window is in such poor condition that it makes it difficult for the driver to see.

11.116 Windshields must be equipped with wipers which are in good operating condition.

11.117 No 1965 or later model passenger car may be sold in Illinois unless the front seat is equipped with two sets of safety belts. No 1961 or later model passenger

car licensed in Illinois may be driven without the same equipment. Belts and installations must meet the standard set by the Illinois Department of Transportation.

11.118 Two headlights are required (one on motorcycles) with lights visible at least 500 feet away. They must be lighted during the period from sunset to sunrise, and at any other time when visibility is so limited as to require the use of lights for safety. Motorcycles must have at least one lighted head lamp at all times when they are on streets and highways. Headlights must be dimmed at least 500 feet before meeting and 300 feet before overtaking another vehicle.

11.119 Lighted parking lamps are required, both front and rear, on any motor vehicle which is standing on any highway during the period from sunset to sunrise. Local communities have the authority to permit unlighted night parking on lighted streets.

11.1110 All motor vehicles, trailers and semi-trailers must have two red lights mounted on the left and right rear (one for motorcycles), visible at least 500 feet away.

11.1111 All vehicles must have at least one red or amber stop light, visible for a distance of not less than 500 feet to the rear in normal sunlight, and actuated upon application of the brake.

11.1112 All motor vehicles, except motorcycles, and all trailers and semi-trailers must have electric turn signals visible at least 300 feet away in normal sunlight. Front signals must be white or amber and rear signals must be red or amber.

11.1113 Motor vehicles may have one or more back-up lights, but they must not be lighted when the vehicle is moving forward.

11.1114 The rear license plate must be lighted so as to clearly legible at least 50 feet away. The light must be on whenever the headlights are.

11.1115 All vehicles of the first division--passenger cars--must be equipped with a front

and rear bumpers designed to absorb the impact of a collision. It is unlawful to alter the suspension system of a car, so as to lift the body from the chassis in excess of 3 inches or to cause the horizontal line from the front to the rear bumper to vary over 3 inches.

11.12 The student can list and discuss various equipment restricted by Illinois law.

11.121 Studded tires may be used from November 15 through April 30 on motor vehicles not having dual tires and of not more than 10,000 pounds gross vehicle weight, if they have wheelwells.

11.122 No motor vehicle may be driven which has a television set located so that the viewer or screen is visible from the driver's seat.

11.123 Only two fender lamps per vehicle are permitted and they must have non-glare, white or amber lights.

11.124 Running board lights are limited to one on each side, and they must be white or amber.

11.125 More than one spotlight is not allowed. When approaching another vehicle, it must not be directed to the left nor more than 100 feet ahead. No more than four lights on the front of a vehicle may be turned on at the same time if any one of them is more than 300 candlepower.

11.126 Except for police or emergency vehicles, red lights visible from the front are prohibited.

11.127 Other than turn signals or hazard indicators, flashing or moving lights are prohibited except as authorized for certain types of vehicles.

11.128 Projecting loads extending four feet to the rear of a vehicle must display, during hours of darkness or periods of poor visibility, a red light at the rear of the load which is visible for at least 500 feet.

11.13 The student can list various types of the more common optional equipment and discuss these options in terms of their advantages and disadvantages.

11.131 Power steering (standard on some cars) makes steering physically easier for the driver. The major disadvantage to power steering is that some drivers, especially inexperienced drivers, may tend to oversteer.

11.132 Power brakes (standard on some cars) makes braking easier. Persons not used to power brakes may find that they sometimes brake too hard.

11.133 Radial tires (also standard on some cars) increase traction and handling. Radial tires can be dangerous if they are installed on an automobile without a radial tuned suspension.

11.134 Air conditioning can greatly increase the comfort of the driver and his passengers in warm weather. Air conditioning does put a strain on the engine and the driver must be careful that the engine does not overheat.

11.135 A rear window defroster can be of great aid in defrosting the rear window in cold weather. The driver will still have to wipe excess snow and ice from the rear window.

11.136 Cruise control can aid the driver in maintaining a constant speed on the open road. The cruise control should not be used in conditions where constant speed cannot be maintained.

11.137 Power windows, seats, and door locks enable the driver to control the windows, seats, and locks conveniently by the touch of a button. These items put a slight strain on the electrical system.

11.138 Radio and/or stereo system are other convenience items a driver can choose to have in his car. Care must be taken not to allow these items to interfere with the driver's concentration.

EPISODE 11.2 Observation and Interpretation of Vehicle Subsystems for Proper Performance

EPISODE OBJECTIVE - The student can identify basic signs and symptoms of vehicle malfunctions, name the vehicle subsystem affected, and state the consequences if the condition is not corrected.

11.21 The student can observe basic signs and symptoms of ignition and electrical system malfunction.

11.211 If the starter does not turn the engine over quickly, the starter may be malfunctioning, or more likely, the battery is not charging properly. You should take your car to a garage to have the ignition and the battery water level checked. It may be necessary to replace the starter or recharge or replace the battery.

11.212 If the gauge lights or running lights get dim, flicker, or go out, it is possible that you have a short in a wire, a blown fuse, or a discharging battery. You should seek help immediately from a professional source.

11.22 The student can observe basic signs and symptoms of lubrication system malfunction.

11.221 If the oil-pressure light comes on you should stop the car immediately. Check the "dip stick" to determine the oil level in the crankcase. Driving a car low on oil will damage engine parts.

11.222 Have the oil changed and various parts greased according to your owner's manual specifications.

11.223 Have the oil checked whenever you get gasoline. If you have to add oil often, it is a sign that your engine is either burning or leaking oil.

11.23 The student can observe basic signs and symptoms of transmission system trouble.

11.231 If the car jumps abruptly or hesitates when the selector lever is moved from one gear to another, it may be a sign of transmission trouble. Seek a competent mechanic to check the transmission.

11.232 You should check the transmission fluid level once a month to insure that it is not leaking out.

11.24 The student can observe basic signs and symptoms of cooling system malfunction.

11.241 If the temperature gauge shows that the water in your radiator is overheating, you should stop your car immediately and, after allowing the engine to cool, add water to the radiator. The overheating would likely be caused by a loose fan belt, clogged radiator, or punctured hose. These items should be checked and replaced or repaired if necessary.

11.242 A winter-summer formula antifreeze should be used in the radiator at all times. Pre-winter checks should be made of the antifreeze, the radiator (for leaks), the fan belt, the water pump, and the hose connections (for wear). Repairs and replacements should be performed if necessary.

11.25 The student can observe basic signs and symptoms of steering and suspension system malfunction.

11.251 If, with power steering and the engine running, there is any "play" when you turn the steering wheel, have the steering system checked. With manual steering, have the steering checked if you have over two inches of "play."

11.252 If the steering wheel is hard to turn, see if there is enough air in the tires. Also see that the front wheels and steering gear are checked and lubricated. if they need to be.

11.253 If there is a "shimmy" or wobbling in the front wheels, or a pull to right or left not caused by wet brakes, have the front wheels checked and adjusted for balance and alignment. Even a slight bump against a curb while parking can throw the steering mechanism out of alignment.

11.254 If you feel a sudden bump as you turn and you have not hit a bump in the road, have the steering system checked.

11.255 If the car wanders from one side of the road to the other, have the steering checked as soon as possible.

11.256 Even if steering seems all right, have the steering system checked often, according to the time suggested in your owner's manual, especially in an old car.

11.26 The student can observe basic signs and symptoms of braking system malfunction.

11.261 If your brake pedal can be pushed to within two inches of the floor, it is time to have the brakes checked and adjusted.

11.262 If the brakes "fade" when using them continuously on a downgrade, it is usually a sign of trouble. The brake fluid and linings should be checked.

11.263 The parking brake should hold the car stationary. If it does not, you should have it checked.

EPISODE 11.3 Preventative Maintenance

EPISODE OBJECTIVE - The student can describe the need for preventative maintenance of safe vehicles, discuss vehicle service schedules, and list some basic criteria for choosing a reliable service agency.

11.31 The student can define preventative maintenance.

11.311 Preventative maintenance is the regular inspection and correction of a vehicles condition so as to prevent wear and damage, thus maintaining its safety and efficiency.

11.312 Preventative maintenance is carried out by both the driver and his service agency.

11.32 The student can list basic preventative maintenance checks that he can perform on his car.

11.321 Periodically check the dipstick to determine the oil level.

11.322 Occasionally check the transmission and brake fluid to insure that there are no leaks.

11.323 Check the water level of the radiator. Make sure the radiator is kept filled.

11.324 Check the fan belt for tightness and wear.

11.325 Inspect all hoses and hose connections for cracking or excessive wear.

11.326 Check the battery often to insure that the terminals are free of corrosion and the water at the proper level.

11.327 Check the tires often for uneven or excessive wear. Uneven wear usually indicates a need for a wheel alignment and/or balance.

11.328 Check the spark plugs and spark plug wires. Make sure the plug wires are relatively clean and properly attached.

11.329 Check the exhaust system for leaks.

11.33 The student can discuss various parts of the automobile which require scheduled maintenance by a service agency.

11.331 The engine tune-up should be performed in accordance with the owner's manual specifications. The tune-up involves such things as changing the oil and oil filter, checking the carburetor, cleaning or changing the air filter, and checking the alternator, ignition wires, timing, voltage, drive belts, and hoses. Fluid levels in the battery and radiator must also be examined. The battery terminals may need cleaning, and various of the emission control devices may have to be adjusted

or replaced. The mechanic may also recommend new spark plugs and new fluids.

11.332 The transmission and drive shaft should be periodically checked. Transmission fluid levels should be checked and the universal joints greased if necessary. These things can be done as part of a tune-up.

11.333 Tires should be rotated periodically according to owner's manual specifications. The steering and suspension system should be checked and shock absorbers replaced when necessary. Wheel bearings generally need to be replaced every 20,000 to 30,000 miles.

11.334 The brake linings and fluid should be inspected frequently according to your owner's manual specifications. Worn linings should be replaced in order to prevent damage from occurring to discs or drums.

11.335 The exhaust system should be inspected often. If a leak is found, repairs should be made immediately. This inspection can also be a part of a regular tune-up.

11.34 The student can list some general criteria for selecting a reliable service agency.

11.341 If you buy a new car, the dealer who sold you the car is probably best equipped to service your car, especially while it is still on warranty.

11.342 A good service agency will have a good reputation. Ask around. A good service agency will usually, though not always, have been in business for quite some time.

11.343 The capabilities of a service agency should also be considered. An agency offering a wide range of services is more capable of repairing your car.

11.344 Cost should be another consideration; however, the cheapest place may not always be the best. A reputable service agency usually charges prices comparable to most other service agencies.

Suggested Learning Activities

1. Make a list of various vehicle equipment required by Illinois law.
2. Construct a chart of the advantages and possible disadvantages of various optional vehicle equipment.
3. During laboratory lessons, evaluate vehicle control systems for proper functioning.
4. Using the owner's manual, set up a preventative maintenance schedule for the driver education car.
5. Construct a check list of things you can check for under the hood and around the car to determine proper functioning.
6. Describe the types and causes of abnormal tire wear.
7. Read Chapter 20, pages 312-335, of Let's Drive Right, 5th edition.
8. List the expected services that should be included in a regular tune-up.

UNIT 12.0 Basic Vehicle Dynamics and Advanced Driving Techniques

UNIT OBJECTIVE - The student can define and recognize, in a manner sufficient for safe and effective operation, basic capabilities and limitations of motor vehicles under various conditions found in the HTS; he uses this basic knowledge and skills for performing emergency-evasive manuevers for avoiding eminent traffic accident situations.

EPISODE 12.1 General Performance Capabilities for Motor Vehicles

EPISODE OBJECTIVE - The student can estimate the basic performance capabilities and limitations of a motor vehicle under various driving conditions.

12.11 The student can define acceleration and discuss acceleration and speed capabilities for various types of vehicles.

12.111 Acceleration is an increase in speed, either from a stopped position, or from one speed to a higher speed.

12.112 Large trucks, buses, and small compact cars generally have poor acceleration capabilities, thus care should be exercised in maintaining an adequate space cushion behind these vehicles.

12.113 Large cars and small cars with powerful engines generally have very good acceleration capabilities.

12.114 All vehicles acceleration capabilities decrease as their speed increases.

12.115 Speed is affected by such things as the amount of gasoline supplied to the engine, size of vehicle, size and power of engine, and gravity.

12.116 Large vehicles and small compacts have difficulty maintaining constant speed, especially on grades where gravity also becomes a factor.

12.12 The student can define directional control and cornering ability and discuss these terms as they relate to safe driving.

12.121 Directional control is the ability of a vehicle to hold a straight line when it is not influenced by outside forces.

12.122 The contour of the road, traction, and wind speed and direction are common factors that affect directional control.

12.123 Cornering ability is the ability of the vehicle to be steered around a corner without a loss of precise control.

12.124 Some vehicles tend to oversteer, e.g. the front end tends to move towrd the inside of the path while the rear tends to slide out.

12.125 Some vehicles tend to understeer, e.g. the front end tends to move away from the inside of the path.

12.126 Other vehicles should be observed for directional control and cornering cappbilities.

1. Vehicles that sag to one side or the front or rear may have either worn shock absorbers or broken springs which will greatly affect, directional control and cornering.
2. Overloaded vehicles will have less directional control on curves and turns.
3. Wheel shimmy, wobble, and bounce are indicators of tire, steering or suspension defects which affect handling.
4. Cars with raised rear ends usually have poor cornering capabilities.
5. Vehicles towing trailers always lose acceleration and control capabilities.
6. Motorcycles have excellent control capabilities at slow speeds but about the same as other automobiles at higher speeds.

12.13 The student can discuss braking and deceleration as they relate to safe driving.

12.131 Stopping time and distance are influenced by such factors as roadway condition, type of vehicle, speed of vehicle, and vehicle performance ability.

12.132 Braking distance increases at a rate equal to the square of the difference in speed.

12.133 Deceleration is achieved by either removing pressure from the gas pedal or applying pressure to the brake pedal.

12.134 Other vehicles should be observed for variations in braking capabilities.

1. Overloaded vehicles require longer distances and increased time to stop.
2. Large vehicles often require longer distances to stop.
3. Motorcycles stop quickly at low speeds but about equal to other automobiles at higher speeds

EPISODE 12.2 Advanced Driving Techniques

EPISODE OBJECTIVE - The student can successfully perform emergency-evasive maneuvers on an off-street driving range.

12.21 The student can follow the correct procedure for driving through the serpentine maneuver which involves weaving in and out of a straight line of traffic cones placed sixty feet apart at a constant speed without diverging from the designated path and without hitting or knocking over any cones.

- 12.211 Fasten seat belt and shoulder harness before beginning.
- 12.212 Assume proper driving position, hands at 9 and 3 on the steering wheel.
- 12.213 Enter the serpentine maneuver either to the left or to the right side of the first cone.
- 12.214 Keep as close to the cones as possible and start turning as the cone disappears beneath the bumper.
- 12.215 Try to develop rhythm for the steering motion to accomplish smooth maneuvers and control of the vehicle.

12.22 The student can follow the correct procedure for driving through the controlled braking maneuver which involves approaching a barricade by way of a straight twelve foot lane at a selected speed. Upon the instructors verbal command, the student brings the vehicle to a stop in the shortest possible distance while steering around the barricade and back into his own lane.

- 12.221 Fasten seat belt and shoulder harness before beginning.
- 12.222 Assume proper driving position, hands at 9 and 3 on the steering wheel..
- 12.223 Proceed down the approach lane at a speed selected by the instructor.
- 12.224 At a point determined by the instructor, a command will be given to initiate braking and evading the barrier.
- 12.225 At the command, the student should steer the vehicle to evade the barrier and simultaneously brake.
- 12.226 As soon as the first barrier is cleared, steer back to the right hand lane to evade the second barrier, and come to a complete stop in the shortest possible distance.

12.227 A steady force on the brake pedal is usually the best method of applying the brakes. If the brakes lock, ease up on the brakes and then resume braking.

12.23 The student can follow the correct procedure for driving through the left-right evasive maneuver which involves approaching a barricade on a 12 foot lane at a selected speed. Upon the instructor's command of right or left, the student steers around the barricade in the commanded direction at a variance of no greater than twelve feet and without hitting or knocking over any cones.

12.231 Fasten seat belt and shoulder harness before beginning.
12.232 Assume proper driving position, hands at 9 and 3 on the steering wheel.
12.233 Enter the lane designated by the traffic cones.
12.234 At a designated point, the instructor will give a command to start the maneuver.
12.235 Turn the steering wheel sharply left or right to evade the obstacle and release the accelerator. Do not use the brake pedal.
12.236 Turn the steering wheel sharply in the reverse direction to stay in the proper lane.
12.237 Continue at normal speed.

12.24 The student can follow the correct procedure for driving through the off-road recovery maneuver which involves dropping the wheels off a 12 foot roadway (leaving two on) and returning the vehicle to the roadway without hitting or knocking over any cones which designate the inside border of the 12 foot roadway.

12.241 Fasten seat belt and shoulder harness before beginning.
12.242 Assume the proper driving position, hands at 9 and 3 on the steering wheel.
12.243 Accelerate down the cone marked lane at a speed designated by the instructor.
12.244 At the beginning of the curb, drop the right wheels off the edge of the road, while maintaining speed, or straddle the curb while approaching.
12.245 Center the vehicle over the curb so that the wheel has room to turn.
12.246 Halfway down the curb, turn the steering wheel approximately 90° left.

12.247 Upon feeling or hearing the right front wheel hit the curb, immediately steer back to the right to maintain lane position.

12.248 Turn the vehicle around and run the exercise the other way, dropping the left wheels off the edge. The procedure is the same except the steering directions are reversed.

12.25 The student can follow the correct procedure for driving through the blowout recovery maneuver which involves controlling the car within a 12 foot lane after a blowout is caused by a blowout simulator. The student slows the vehicle to a speed which would allow for a safe exit from the highway.

12.251 Fasten seat belt and shoulder harness before beginning.

12.252 Assume proper driving position, hands at 9 and 3 on the steering wheel.

12.253 Proceed down the cone marked lane at a speed selected by the instructor.

12.254 Midway down the lane, the instructor blows the right front tire.

12.255 Remove your foot from the accelerator, steer to the left just enough to maintain lane position. Do not brake. The steering left is necessary to overcome the pull to the right.

12.256 After the vehicle has slowed and under control, brake gently to a stop.

12.257 Repeat the same procedure with the instructor blowing the right rear tire. In this type of blowout, hold the wheel steady to prevent the car from swaying from side to side.

12.26 The student can follow the correct procedure for driving through the skid recovery maneuver which involves driving onto a wet surface (skid pan) and placing the vehicle into a skid by turning the steering wheel and braking. Recover from the skid without hitting or knocking over any cones.

12.261 Fasten seat belt and shoulder harness before beginning.

12.262 Assume proper driving position, hands at 9 and 3 on the steering wheel.

12.263 Enter the skid pan at a speed determined by the instructor.

12.264 Place the vehicle into a skid on the command of the instructor.

12.265 Turn in the direction of the skid.

12.266 Decelerate cautiously in order to maintain traction and good steering control.

12.267 As soon as the vehicle responds to the skid correction, countersteer in the opposite direction until the front wheels are as straight as possible and continue in the original path. Be prepared for a second skid if it should occur.

Suggested Learning Activities

1. Read Chapter 4, pages 44 through 59 of Let's Drive Right, 7th edition.
2. Write a short paper discussing the acceleration and speed capabilities of various types of vehicles using the HTS.
3. View a transparency defining acceleration, deceleration, directional control, cornering ability, and braking.
4. List five indicators of poor directional control and cornering ability.
5. Discuss some of the common factors which influence stopping time and distance.
6. Practice performing various emergency-evasive maneuvers such as serpentine, controlled braking, left-right evasive, off-road recovery, blowout, and skid recovery.

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